

## **Historic, Archive Document**

Do not assume content reflects current scientific knowledge, policies, or practices.



78F  
Agr. Econ. Rep.  
# 34  
pg 1

# Termination of the Bracero Program

FOREIGN ECONOMIC ASPECTS

FOREIGN AGRICULTURAL ECONOMIC REPORT NO. 34  
ECONOMIC RESEARCH SERVICE / U.S. DEPARTMENT OF AGRICULTURE

## CONTENTS

	Page
Summary and Conclusions . . . . .	1
Background . . . . .	4
Part I. Foreign Trade in Products Affected by the Bracero Program . . . . .	6
Selection of Crops to be Studied . . . . .	6
Crops Other Than Fruits and Vegetables . . . . .	7
Crops Protected by Tariffs . . . . .	8
Imports Rise . . . . .	10
Mexico Is Principal Foreign Supplier. . . . .	12
Exports Rise Moderately . . . . .	15
Import-Export Relationship . . . . .	17
Citrus Imports are a Function of Weather. . . . .	17
Analysis of Individual Crops. . . . .	19
Tomatoes . . . . .	19
Strawberries . . . . .	24
Asparagus . . . . .	28
Cucumbers . . . . .	29
Cantaloups . . . . .	31
Watermelons . . . . .	33
Lettuce . . . . .	33
Celery . . . . .	35
Part II. Overall Trade and Balance-of-Payment Considerations . . . . .	37
Bracero Savings in the Context of U.S. International Payments Position . . . . .	37
U.S.-Mexican Trade Balance Highly Favorable to United States . . . . .	38
Mexicans Pay for Excess Imports with Tourist Services . . . . .	39
Mexican Travelers Spent Quarter Billion Dollars in United States in 1964 . . . . .	39
The U.S. "Travel Balance" With Mexico . . . . .	40
Combined "Trade and Travel Balance" with Mexico Positive. . . . .	40
Capital Movements and Balances. . . . .	41
U.S. Firms Increase Plant and Equipment Expenditures in Mexico . . . . .	44
U.S. and World Bank Lend \$45 Million for Mexican Agricultural Development in 1965 . . . . .	45
Mexican Balance of Payments Shows Declining Current Account Deficit in 1965 . . . . .	45
Index of Sources. . . . .	47
Appendix.--A Comparison of U.S. and Mexican Estimates on Travel Expenditures. . . . .	50

## TABLES

<u>Table</u>	<u>Page</u>
1. Man-months of seasonal hired labor, total and foreign, for 12 crops with largest foreign labor input, United States, 1964 . . . . .	6
2. U.S. import duties on bracero crops . . . . .	9
3. U.S. imports for consumption, selected labor-intensive crops and their principal products, 1956-66 . . . . .	11
4. U.S. imports for consumption from Mexico, selected labor-intensive crops and their principal products, 1956-66 . . . . .	14
5. U.S. exports of domestic, labor-intensive crops and their principal products, 1956-66 . . . . .	16
6. U.S. total citrus crop production and foreign trade aggregates of principal products, 1956-66 . . . . .	18
7. U.S. exports of principal citrus products, 1956-66 . . . . .	18
8. U.S. imports of selected citrus items from all origins and from Mexico, 1956-66 . . . . .	19
9. U.S. imports for consumption of fresh tomatoes by duty seasons, 1961-66 . . .	20
10. Tomato production in Mexico, 1956-65 . . . . .	21
11. Commercial production of tomatoes for the fresh market in the United States, by duty periods, 1961-66 . . . . .	23
12. Tomatoes for fresh market: U.S. production, imports, exports, and apparent consumption, 1956-65 . . . . .	24
13. U.S. exports of tomatoes and tomato products, 1956-66 . . . . .	25
14. Strawberries: U.S. production, imports, exports, and apparent consumption, 1956-66 . . . . .	26
15. Strawberry production in Mexico, 1956-66 . . . . .	27
16. Asparagus: U.S. production, imports, exports, and apparent consumption, 1956-66 . . . . .	28
17. Cucumbers: U.S. production, imports, exports, and apparent consumption, 1956-66 . . . . .	30
18. Other vegetables packed in salt, in brine, or pickled: U.S. imports for consumption from Mexico, 1960-66 . . . . .	31
19. Cucumbers: Production in Mexico, 1956-66 . . . . .	32
20. Cantaloups: Production in Mexico and the United States, and U.S. imports, exports, and apparent consumption, 1956-66 . . . . .	32
21. Watermelons: Production in Mexico and the United States, and U.S. imports, exports, and apparent consumption, 1956-66 . . . . .	34
22. Lettuce: U.S. production, imports, exports, and apparent consumption, 1956-66 . . . . .	34
23. Lettuce: Production data, 1964-65 changes, United States and California . . .	35
24. Celery: U.S. production, imports, exports, and apparent consumption, 1956-66 . . . . .	36
25. U.S. trade balance with Mexico, 1960-66 . . . . .	39

26. U.S. trade and travel balance with Mexico, 1960-65 . . . . .	40
27. Liabilities to Mexico and claims on Mexico reported by banks in the United States, short-term and long-term, end of the year, 1963-65. . . . .	42
28. Month-to-month variations in short-term liabilities to Mexico and claims on Mexico reported by banks in the United States, December 1964-June 1966 . . . . .	43
29. Liabilities to Mexico and claims on Mexico reported by nonbanking concerns in the United States, end of 1963, 1964, and 1965 . . . . .	43
30. Plant and equipment expenditures of U.S. direct investments in all Mexican industries, 1963-67. . . . .	44
31. Balance of payments, Mexico, 1961-65 . . . . .	46
32. A comparison of U.S. and Mexican estimates on travel expenditures, 1963, 1964, and 1965. . . . .	50

## ACKNOWLEDGMENTS

The author gratefully acknowledges helpful suggestions received from K. L. Bachman, L. P. Schertz, and E. E. Gavett of the Economic Research Service, and from J. W. Stewart, G. E. Sindelar, and A. C. Cook of the Foreign Agricultural Service. Helen H. White, Economic Research Service, assisted with the statistical compilation and computation.

\* \* \*

This report was prepared from information available as of October 18, 1966.

# Termination of the Bracero Program

## Foreign Economic Aspects

by

Hans G. Hirsch<sup>1</sup>

## Summary and Conclusions

The special legislation under which seasonal agricultural workers from Mexico (braceros) had been admitted into the United States since 1951 expired at the end of 1964.<sup>2</sup> Since then a drastically reduced number of foreign seasonal agricultural workers has been admitted under special provisions of the Immigration and Nationality Act. Non-Mexicans have been admitted under these provisions for many years. Before the bracero program was terminated, most foreign seasonal farmworkers were Mexicans. Admissions of braceros reached a maximum in 1956 with 445,000 and declined to 178,000 in 1964 and to 20,000 in 1965.

Twelve crops used four-fifths of the foreign seasonal hired labor employed in all farmwork in the United States in 1964. These crops, in the order of importance of foreign seasonal hired labor relative to all seasonal hired labor for the crop, were lettuce, sugarcane, celery, melons, cucumbers, tomatoes, citrus, sugarbeets, asparagus, strawberries, cotton, and tobacco.

Sugarcane and tobacco foreign seasonal labor came from the British West Indies. Labor employed on the other crops mentioned is believed to have come predominantly from Mexico. The production of sugarbeets and cotton has been substantially mechanized.

This leaves eight crops which were likely to have been affected by the termination of the bracero program. Imports of these crops, in general, have tended to increase for many years. Imports of fresh oranges and citrus juice, however, tended to be influenced by the condition of the crop in the United States. The fresh fruit equivalent of annual imports of fresh oranges and citrus juice was about the same in fiscal year 1966 as in 1956-62, with imports during the 2 poor crop years, 1963 and 1964, about four times as high.

The aggregate value of imports of the remaining crops--all of them fruits and vegetables--was \$95 million in fiscal year 1966, up \$33 million from a year earlier. The magnitude of this increase stands in sharp contrast to the \$5 million average annual increase in these imports from \$21 million in 1956 to \$66 million in 1965.

The \$33 million increase in fiscal year 1966 was equal to 53 percent. This increase was composed of a 31-percent average increase in the quantities imported and of a 17-percent average price increase. Fresh tomatoes accounted for \$21 million of the \$33

<sup>1</sup> Agricultural Economist, Trade Statistics and Analysis Branch, Foreign Development and Trade Division, Economic Research Service.

<sup>2</sup> P. L. 82-78; 65 Stat. 119-121, July 12, 1951; 7 USCA 1461.

million increment; strawberries, mostly frozen, for \$9 million; and tomato products for \$4 million; cantaloup imports declined by about \$1 million. Mexico is by far the most important country of origin for the imports of these products. Mexican production series show sharp increases. From 1956 to 1965, strawberry and watermelon production almost quadrupled; cantaloup production tripled; cucumber production first declined to negligible proportions, but then rose to twice the production of 10 years earlier; and tomato production increased by one-third.

U.S. exports of fruits and vegetables (other than citrus) in the production of which bracero labor was important amounted to \$63 million in fiscal year 1966, up \$4 million or 7 percent from a year earlier. This increase reflects the net effect of a 13-percent average increase in the price of the products exported and a 5-percent average decline in their quantity.

In a world in which everything changes, it is difficult causally to connect the termination of the bracero program at the end of 1964 with the changes in U.S. fruit and vegetable imports and exports which have taken place since then. Also, a period of less than 2 years is too short for any conclusive evaluation.

Two or three specific developments, however, may be more directly related to the bracero situation than any others. The sharp drop in white asparagus production and in canned asparagus exports (mostly white asparagus) after 1964 was caused by a lack of workers skilled in the cutting of asparagus spears. The decline in the domestic production of strawberries for processing and the continued increases in Mexican production and in U.S. imports of frozen strawberries from Mexico may also have been due partly to the termination of the program. Finally, there was a large increase in imports of "other vegetables in brine, in salt, or pickled," particularly from Mexico, which may be the beginning of an important development, with Mexico becoming the grower and shipper of semiprocessed pickles.

By contrast, the author is not prepared to establish a causal relationship between the termination of the bracero program and the large recent increases in fresh tomato imports. These increases have been far in excess of the slight decline in production and have thus added to apparent consumption and most recently even to apparent per capita consumption.

Long before changes that may be induced by the termination of the bracero program are reflected in foreign trade, investment decisions are made with respect to fruits and vegetables. It has been impossible to obtain data on the investment of American capital in the Mexican fruit and vegetable industry, although there is some indication that such investment has taken place at a heavier rate during the last few years than some time back; but no quantification of this has been possible, nor any differentiation between the periods immediately before and after the termination of the bracero program.

In addition to a consideration of the imports and exports of specific crops, an evaluation of the foreign economic aspects of the termination of the bracero program requires an analysis of the U.S. trade and travel balance with Mexico and of the Mexican balance of payments. Braceros' annual earnings totaled about \$100-110 million through 1964. Estimates of the portion which reached Mexico in the form of monetary assets or credits range from about \$30 to more than \$60 million, depending upon assumptions about bracero purchasing in the United States. Regardless of what may be the exact amount, the loss in foreign exchange earnings is serious to Mexico, and in view of the trade balance between the two countries, to the United States as well. That balance has been highly favorable to the United States, averaging about \$250 million a year from 1961 to 1963 and about \$450 million since then. The United States receives a portion of the payment for this favorable trade balance in the form of tourist services. However, a U.S.-Mexican travel balance of well over \$200 million in favor of Mexico leaves a combined U.S.-Mexican trade and



travel balance of over \$200 million in favor of the United States. A sizable portion of this gap has been closed by U.S. direct investments in plant and equipment expenditures for U.S.-owned Mexican industries.

U.S. banks report a 1964 to 1965 decline in their short-term liabilities to and an increase in their short-term claims on Mexico, amounting in the aggregate to a \$62 million decline in net short-term liabilities.

Against this background and against the loss of braceros' receipts, the granting to Mexico in 1965 of two agricultural development loans by the U.S. Agency for International Development and by the World Bank in the aggregate amount of \$45 million assumed special significance.

The Mexican balance-of-payment statistics show a greatly increased deficit in goods and services in 1964 over 1963. But from 1964 to 1965, the current account improved by almost \$50 million in spite of the drastic decline in braceros' receipts. The potential binational financial difficulties implied in the termination of the bracero program were submerged in the larger stream of adjustments in trade, tourism, investments, and short-term financing.

Nevertheless, to compensate for a loss in earnings amounting to at least \$30 million Mexico must import less, export more, or make appropriate financial adjustments. Because of the preponderance of the United States among Mexico's trading and investment partners, it would be unrealistic to expect that the compensatory adjustments might be made primarily with third countries. Indeed, considering the very favorable trade balance of the United States with Mexico and its favorable overall goods and services balance (i.e., principally trade, travel, and bracero balance combined) with Mexico, the immediate effect of the termination of the bracero program was a further unbalancing of the U.S.-Mexican account for goods and services. The nature of the possible offsetting adjustments and the preponderant role of the United States in Mexican international economic relations lead to the conclusion that the termination of the bracero program cannot be assumed to have resulted in any lasting, fundamental, or substantial benefit to the United States balance-of-payments position.

## Background

The number of seasonal agricultural workers from Mexico (braceros) admitted under Public Law 82-78, enacted in 1951, reached a maximum in 1956 with 445,000; during the following 3 years, 1957-59, the number remained rather stable, averaging 436,000. Thereafter, admissions declined. In 1963, 187,000 Mexicans were admitted, and worked about 550,000 man-months or 46,000 man-years; 57 percent of this total (316,000 man-months or 26,000 man-years) was in California. In 1964, the last year before that legislation (commonly called the "bracero program") expired, 178,000 Mexicans were admitted.<sup>3</sup> The seasonal employment of foreign labor in California averaged 35,780 "contract foreign man-years" per year during 1959-64.<sup>4</sup> In sharp contrast to this number only 3,200 such man-years were reported for 1965.

The admission of braceros after the formal termination of the program was authorized under special provisions of the Immigration and Nationality Act.<sup>5</sup> These provisions, however, were stringently administered, as the greatly reduced number of foreign workers admitted indicates. Foreign seasonal agricultural workers from countries other than Mexico have been admitted under these provisions for many years.

Almost one-half of the 32,580 foreign man-years decline in California was offset by an increase in the "seasonal domestic man-years" from an average of 100,500 during 1959-64 to 115,000 in 1965. The balance of the decline in foreign man-years--slightly more than one-half--is reflected in a decline in the total seasonal man-year employment from 136,280 (1959-64 average) to 118,200 (1965).

Mexicans admitted to the United States as immigrants (greencard holders) are considered as domestic labor. According to the Immigration and Naturalization Service, 42,086 natives of Mexico were admitted as immigrants during calendar year 1965, compared with 33,920 during 1964 and slightly over 50,000 a year during the average of the 3 fiscal years 1961-1963. It is not known how many of these people were seasonal hired farm workers.

The question arises how the foreign trade of the United States developed in those crops the domestic production of which in the past relied heavily on braceros. The first major part of this study is devoted to the description and analysis of these trade developments.

The discussion proceeds from the selection of the crops to be studied and the tariff protection accorded these crops to the presentation of aggregate data on the imports and exports of these crops and their principal products in the form of 10-year time series 1956-65. To utilize the most recent information, data for the fiscal year 1966 (year ended June 30, 1966) and, for comparative purposes, for the fiscal year 1965 are also

<sup>3</sup> R. C. McElroy and E. E. Gavett, Termination of the Bracero Program, U.S. Dept. Agr., Agr. Econ. Rpt. 77, June 1965.

<sup>4</sup> Final Report of the California Farm Labor Panel to Secretary of Labor W. Willard Wirtz, Dec. 1, 1965, Los Angeles, Calif.; Appendix I (Eye) in Year of Transition, Seasonal Farm Labor 1965, Report from the Secretary of Labor; also published in Congressional Record--House, Jan. 10, 1966, pp. 9-20.

<sup>5</sup> P. L. 82-414; 66 Stat. 163, June 27, 1952; 8 USCA 1182, Regulations for certification and use of foreign labor for agricultural employment under the authority of this law were issued by the Secretary of Labor on December 19, 1964. (See 29 F. R. 19101-19102; 20 CFR 610.10).

shown. The advantage of this method of presenting the latest information is that all data are annual data and comparable as such. The disadvantage of this method is that the half-year, July-December 1965, forms part of both the calendar year 1965 and the fiscal year 1966.

Since Mexico is the principal country of origin for U.S. imports of the fruits and vegetables affected by termination of the bracero program, data on imports from Mexico and Mexican production are presented. The domestic production, imports, exports, and apparent consumption of each of these crops are analyzed.

One would expect that the termination of the bracero program would have an obvious effect on the U.S.-Mexican balance of payments. The revolutionary change in the employment of domestic, and particularly California, farm labor is investigated relative to the U.S. balance of trade and balance of payments vis-a-vis Mexico in the second part of this study.

It should be kept in mind, however, that it is difficult to establish conclusive causal relationships between the termination of the bracero program and changes in acreage, production, and foreign trade of bracero-worked crops. The determination of causal relationships between the termination of the bracero program and general economic developments such as changes in the balance of payments is still more difficult, if not impossible.

# Part I. Foreign Trade in Products Affected by the Bracero Program

## SELECTION OF CROPS TO BE STUDIED

The crops which required most man-months of foreign seasonal hired labor in 1964 were tomatoes, citrus, lettuce, cotton, sugarcane, strawberries, sugar beets, cucumbers, melons, tobacco, celery, and asparagus, in that order. Foreign seasonal hired laborers spent 504,700 man-months on these crops, 80 percent of the 633,900 man-month total (which included 508,100 man-months of Mexican labor). The remaining man-months were spent on a variety of other agricultural enterprises (table 1).

Foreign seasonal hired labor as a percentage of total seasonal hired labor was most important in the production of lettuce, sugarcane, celery, melons, cucumbers, tomatoes, and citrus, in that order. Foreign seasonal hired labor was less than 20 percent of total seasonal hired labor employed in the production of sugar beets, asparagus, and strawberries, and less than 4 percent in the production of cotton and tobacco.

TABLE 1.--Man-months of seasonal hired labor, total and foreign, for 12 crops with largest foreign labor input, United States, 1964<sup>1</sup>

Crop	Total labor	Foreign labor	Foreign relative to total	Proportion of foreign labor used on each crop
	Thousand man-months		Percent	Percent
All farmwork. . . . .	8,463.1	633.9	7.5	100.0
Tomatoes . . . . .	345.1	90.5	26.2	14.3
Citrus . . . . .	319.8	69.1	21.6	10.9
Lettuce. . . . .	122.5	67.8	55.3	10.7
Cotton . . . . .	1,769.4	65.2	3.7	10.3
Sugarcane. . . . .	105.7	49.6	46.9	7.8
Strawberries. . . . .	308.5	42.5	13.8	6.7
Sugarbeets . . . . .	160.6	31.9	19.9	5.0
Cucumbers . . . . .	105.5	28.9	27.4	4.6
Melons . . . . .	64.7	18.4	28.4	2.9
Tobacco . . . . .	767.2	14.9	1.9	2.4
Celery . . . . .	44.4	14.4	32.4	2.3
Asparagus. . . . .	60.5	11.5	19.0	1.8
Above crops . . . . .	4,173.9	504.7	12.1	79.6
All other. . . . .	4,289.2	129.2	3.0	20.4

<sup>1</sup> Adapted from Farm Labor Developments, Review and Outlook, U.S. Dept. Labor, Bur. Employment Security, Mar. 1966, p. 11. Crops listed in descending order of man-months of foreign seasonal hired labor absorbed.

## CROPS OTHER THAN FRUITS AND VEGETABLES

Of the crops listed in table 1, cotton, sugarcane, sugar beets, and tobacco are different, in some respects, from the fruit and vegetable crops in the production of which braceros were important. The peculiarities of each of these four crops with respect to the termination of the bracero program are discussed in this section. These peculiarities would make the inclusion of these four crops in the tabulations that follow later meaningless. They are, therefore, omitted from these tabulations.

Foreign seasonal hired workers employed in sugarcane cutting in Florida and on the tobacco crop, mostly in Connecticut, were admitted under the provisions of the Immigration and Nationality Act, even before the termination of the bracero program. However, the expiration of P.L. 82-78 also resulted in a more stringent policy in the admission of foreign seasonal hired farmworkers who had been admitted under the provisions of the Immigration and Nationality Act. This is reflected in the certification procedure issued by the Secretary of Labor.<sup>6</sup> The foreign sugarcane and tobacco workers come from the British West Indies and the Bahamas.

Sugarcane in Florida does not readily lend itself to mechanical harvesting because of its tendency to lodge. Most of it must be hand-cut. The need for laborers to do this work has increased with the tripling of Florida sugarcane production since 1961, although not in proportion to the production increase.<sup>7</sup> A start has been made toward the mechanical harvesting of sugarcane, but for the present, the necessary foreign labor is being admitted. Foreign seasonal hired labor utilized in the Florida sugarcane crop declined only from 49,600 man-months in 1964 to 44,800 in 1965. Eventually the mechanical harvesting of sugarcane is expected to solve the labor problem. So far, no one in Florida has reduced his sugarcane acreage for fear of not being able to harvest it. The 30,000-acre (13 percent) estimated reduction in the acreage harvested in the crop year 1965/66 below that of a year earlier resulted from the imposition of acreage restrictions under the Sugar Act. There would be difficulties, however, if the supply of foreign seasonal hired labor should be cut off before the mechanization problem has been completely solved.

In 1965, foreign seasonal hired labor employed on the tobacco crop amounted to 6,200 man-months, a 58-percent reduction below 1964, compared with the overall reduction of such employment in all farmwork of 83 percent.

The reduction in the man-months of foreign seasonal labor employed on sugarcane and tobacco reflects the application of tighter standards in the admission of such labor. On the other hand, the use of a relatively large amount of foreign seasonal labor in cutting Florida sugarcane shows flexibility in the administration of the provisions under which necessary foreign seasonal labor is admitted.

Use of monogerm sugarbeet seed and of chemical weedkillers in sugar beet production, as well as mechanized harvesting, have proceeded rapidly. During 1965, 2,63 man-hours were required for the production of a ton of sugar beets in the United States, a little less than half the 5,34 hours required during 1950.<sup>8</sup> Only 31,900 man-months of foreign seasonal hired labor were used in the sugar beet crop in 1964; this was about one-fifth of total seasonal labor hired for the sugar beet crop and only 5.0 percent of all man-months of foreign seasonal hired labor.

<sup>6</sup> See footnote 5, p. 4.

<sup>7</sup> Sugarcane acreage for sugar and seed harvested in Florida in thousands of acres (percentage of 1961 in parenthesis): 1961, 63.7 (100); 1964, 222.9 (350); 1965, 193.0 (303); *Agricultural Statistics*, U.S. Dept. Agr., 1965, and *Crop Production, 1965 Annual Summary*, U.S. Dept. Agr., Statis. Rptg. Serv., CR-PR-2-1(65).

<sup>8</sup> *Sugar Reports*, No. 160, p. 32, Sept. 1965, and No. 172, p. 34, Sept. 1966, U.S. Dept. Agr., Agr. Stabiliz. and Conserv. Serv.

In 1966, 1,203,900 acres of sugar beets were expected to be harvested, slightly less than the 1,247,600 acres harvested in 1965; the 1965 amount, in turn, was 147,600 acres (10.5 percent) less than the unrestricted acreage harvested in 1964. In 1965, when acreage restrictions were reimposed after several years of unrestricted production, 61,200 acres less were planted than the 1,375,000 acres of the "national sugar beet acreage requirement," established under the Sugar Act. In 1966, 1,252,900 acres were planted, 182,100 acres less than the "national sugar beet acreage requirement" of 1,435,000 acres.<sup>9</sup> Moreover, 28,200 fewer acres were planted in California in 1966 than in 1965, an 8.9-percent reduction. A partial explanation of the drop in California acreage is that the crop year under which the Crop Reporting Board reports differs from the Sugar Act crop year; the Imperial Valley, Calif., sugar beet crop, which is planted in the fall and harvested in spring, starts a new Crop Reporting Board national crop year, whereas the very same crop forms the end of the preceding national crop year under the Sugar Act. Thus, the 1965 to 1966 acreage decline in California, as reported by the Crop Reporting Board, partially reflects the reimposition of restrictions in the Imperial Valley where the last unrestricted crop was harvested in the spring of 1965 and the first restricted crop in 1966.

In 1966, the "national sugar beet acreage requirement" was raised to 1,435,000, a 60,000-acre increase over 1965. Most of the increase was assigned to "reserve localities," that is, areas with new factories which actually planted hardly any sugar beets at all. Finally some other areas where sugar beet factories ceased to operate were given allocations. Thus, the tripled gap between "national sugar beet acreage requirement" and the acreage planted, from 61,200 acres in 1965 to 182,000 acres in 1966, can be largely explained in terms unrelated to the termination of the bracero program.

The mechanization problem for harvesting cotton has also been solved. Peak employment of all cotton harvest seasonal workers declined at an average annual rate of 52,000 during 1958-63. Peak employment of foreign cotton harvest seasonal workers during that period declined from 172,000 to about 16,000, an average annual decline of about 31,000. The phasing out of these remaining foreign workers--all braceros--representing, as of 1963, 46,000 man-months, (6.8 percent of all foreign man-months of seasonal hired labor, and 2.8 percent of total man-months of seasonal hired labor used for the cotton crop) had little specific impact on the cotton economy.<sup>10</sup> Yet, foreign seasonal hired labor employed on cotton in 1964 increased to 65,200 man-months (10.3 percent of all man-months of foreign seasonal hired labor and 3.7 percent of man-months of total seasonal hired labor used for the cotton crop) before such employment stopped altogether in 1965.<sup>11</sup>

## CROPS PROTECTED BY TARIFFS

The U.S. production of tomatoes, lettuce, cucumbers, celery, oranges, strawberries, melons, and asparagus is protected by import duties, most of them substantial. For several crops, the duty rate is varied seasonally (table 2). An obvious purpose of such seasonal rate differentiation is to protect U.S. growers during their principal production and marketing season while giving a break to consumers during the domestic off-season. Another objective of seasonal duty differentiation could be to enable a trading partner

<sup>9</sup> Crop Production, Dec. 20, 1965; June 10, 1966; July 11, 1966, U.S. Dept. Agr., Stat. Reporting Serv., Crop Reporting Bd.

30 F. R. 15403, Dec. 15, 1965, 7 C.F.R. 850.169; 29 F. R. 14620, Oct. 27, 1964, and 15801, Nov. 25, 1964; 7 C.F.R. 850.147, 850.168-187.

<sup>10</sup> R. C. McElroy and E. E. Gavett, op. cit.

<sup>11</sup> Farm Labor Developments, Review and Outlook, U.S. Dept. Labor, Bur. Employment Security, Mar. 1966.



TABLE 2.--U.S. import duties on bracero crops

Item	Duty per pound	Ad valorem equivalent duty on unit value of Mexican imports 1964 <sup>1</sup>
Vegetables, fresh, chilled, or frozen		
Tomatoes:		
If entered Mar. 1 through July 14 or Sept. 1 through Nov. 14. ....	<u>Cents</u> 2,1	<u>Percent</u> 19
If entered July 15 through Aug. 31 or Nov. 15 through the end of February .....	1,5	13
Lettuce:		
If entered June through October .....	0,85	5
If entered November through May .....	2,0	29
Cucumbers:		
If entered December through February. ....	2,2	28
If entered March through June or September through November .....	3,0	45
If entered July through August .....	1,5	No entries
Celery:		
If entered Apr. 15 through July 31. ....	0,5	4
If entered Aug. 1 through Apr. 14 .....	1,0	No entries
Citrus fruits, fresh, or prepared or preserved		
Oranges (other than mandarin packed in airtight containers): .....	1,0	23
Berries, fresh, or prepared or preserved		
Strawberries, fresh or in brine:		
If entered June 15 through Sept. 15 .....	0,5	No entries
If entered Sept. 16 through June 14 .....	0,75	6
Ad valorem duty		
Frozen strawberries. ....		<u>Percent</u> 14
Melons, fresh, or prepared or preserved		
Cantaloups:		
If entered Aug. 1 through Sept. 15 .....	20	
If entered at any other time .....	35	
Watermelons	20	
Other melons		
If entered December through May .....	17,5	
If entered at any other time .....	35	
Melons, prepared or preserved .....	35	
Asparagus, fresh (classified as "vegetables, fresh, chilled, or frozen, other"). ....	25	
Cucumbers, in brine or pickled (classified as "vege- tables, packed in salt, in brine, or pickled, other") ..	12	

<sup>1</sup> Rates of duty on Mexican imports, 1964; calculated as percentages which specific rates (cents per pound) shown are of unit values of imports for consumption from Mexico. (U.S. Bureau of the Census; U.S. Imports, Tariff Schedules Annotated by Country, 1964 Annual; Washington, D.C.; July 1965).

Source: U.S. Tariff Commission, Tariff Schedules of the United States Annotated (1965). TC Pub. 163.

country receiving a lower U.S. import duty on one of its products in reciprocal trade negotiations to benefit as fully as possible from such a concession. In the absence of seasonal duty differentiation, a third country could gain an advantage primarily intended for the country to which the concession was made.

For strawberries, the lower duty (0.5 cent per pound) applies June 15 through September 15. U.S. statistics report no summer production of strawberries. While some "late spring" production, as reported by the Statistical Reporting Service, may take place after June 15, there is essentially little domestic commercial production for the fresh market during the lower-duty period.

The lower-duty seasons for tomatoes are from July 15 through August 31 and from November 15 through the end of February. During those 5 months of the year, 40 percent of the 1961-65 U.S. commercial tomato crop was produced. The remaining 60 percent was produced during the 7 months when the higher duty rate prevailed.

Similarly, the lowest duty rate on fresh cucumbers applies in July and August when between one-sixth and one-fifth of the domestic crop is harvested. An intermediate duty rate is in effect from December through February when about 10 percent of the domestic crop goes to market, but the highest duty rate prevails during the 7 other months when more than 70 percent of the domestic crop matures.

About 30 percent of the U.S. celery crop is produced during the lower duty season, April 15 through July 31.

Less than half of the lettuce crop is produced during the lower duty season, June through October.

Hardly any domestic honeydew melons (classified as "other melons") are harvested from December through May when the duty rate is only half of the June through November rate. Nearly all of the domestic crop is harvested from June through November.

In contrast to the crops discussed so far, the duty on cantaloups is lower during the period when slightly over 60 percent of the U.S. crop is produced--August 1 through September 15. But in 1964 and again in 1965, no cantaloups whatever were imported during that period--in spite of the significantly lower duty (20 percent ad valorem compared with 35 percent during the balance of the year).

Thus, with but one exception, the seasonal duty rates tend to be highest when most of the domestic crop goes to market. The duty rates shown substantially exceed the 8 percent average duty rate on total U.S. imports from all origins in 1965, except for summer lettuce, fresh strawberries, and celery, three commodities which are not imported in heavy volume.

## IMPORTS RISE

The aggregate value of the imports of tomatoes and tomato products, fresh and frozen strawberries, fresh cucumbers, cantaloups, and watermelons rose to \$95 million during fiscal year 1966, up \$33 million from fiscal year 1965 (table 3).<sup>12</sup> That increment was equal to a 53-percent rise, composed of a 31-percent average increase in the quantities imported and a 17-percent average price increase.<sup>13</sup> Fresh tomatoes accounted for \$21 million of the \$33 million increment, strawberries, (mostly frozen) for \$9 million, and tomato products for \$4 million. Cucumber and watermelon imports increased little, but

<sup>12</sup> Asparagus, celery, and lettuce are excluded from table 3 because of the low value of the imports of these commodities--about \$144,000, \$15,000, and \$33,000, respectively, in 1965; for volume figures see tables 16, 22, and 24. Citrus products are discussed separately.

<sup>13</sup> These rates of increase were obtained by calculating quantity and price indexes according to Fisher's "Ideal" formula.



TABLE 3.--U.S. imports for consumption, selected labor-intensive crops and their principal products, 1956-66

Year	Tomatoes			Strawberries		Cucumbers, fresh	Canta- loups	Water melons	Total
	Fresh	Paste and sauce	Canned	Frozen	Fresh				
VALUE									
Fiscal year:									
1966	50.0	5.8	10.1	14.8	2.0	5.3	6.0	1.4	95.4
1965	28.7	2.4	9.6	6.8	0.8	5.2	7.5	1.3	62.3
Calendar year:									
1965	29.9	3.6	9.0	8.2	1.0	5.3	7.5	1.3	65.9
1964	27.7	2.2	9.7	5.9	0.7	4.7	6.8	1.3	59.0
1963	20.9	2.8	9.4	4.5	0.5	3.7	4.9	1.1	47.8
1962	17.6	4.7	9.3	4.1	0.2	2.4	4.5	1.2	44.0
1961	13.0	4.5	11.0	3.7	0.1	1.9	4.0	1.2	39.4
1960	23.9	1.2	8.5	3.2	0.1	2.9	4.0	2.2	46.0
1959	19.9	1.0	7.3	1.7	(1)	1.0	2.9	1.8	35.6
1958	20.6	1.0	8.4	1.7	(1)	1.1	2.2	1.1	36.1
1957	8.2	0.7	6.0	1.4	(1)	1.1	2.3	0.6	20.5
1956	6.7	1.3	6.7	1.6	(1)	1.2	2.6	0.6	20.7
QUANTITY									
Fiscal year:									
1966	341.1	38.6	102.7	79.5	10.4	71.1	139.1	61.9	
1965	261.9	15.4	82.9	47.2	5.9	74.6	148.2	72.3	
Calendar year:									
1965	269.0	24.1	87.6	53.9	6.4	75.8	148.7	71.5	
1964	249.2	13.2	81.5	40.8	5.2	51.4	131.7	57.5	
1963	242.0	18.5	97.4	35.1	3.6	61.2	111.1	63.0	
1962	236.2	35.7	128.3	32.3	1.0	59.0	98.0	49.6	
1961	176.2	38.4	161.7	23.8	0.7	44.3	79.6	45.1	
1960	312.7	9.0	109.2	25.0	0.7	66.1	79.4	72.0	
1959	262.6	7.2	97.5	14.1	0.2	35.1	56.5	58.0	
1958	264.5	7.6	122.0	14.4	(1)	45.1	44.0	43.5	
1957	119.5	4.5	81.0	13.8	(1)	42.0	50.2	24.5	
1956	95.0	9.2	91.4	11.5	0.1	43.6	51.9	37.7	

<sup>1</sup> Less than 0.05.

Sources: Economic Research Service, U.S. Department of Agriculture, Foreign Agricultural Trade of the United States; U.S. Bureau of the Census, Reports FT 110, FT 120, FT 246, and for fiscal year 1966 data, Agricultural Specialist Reports (publicly available computer printouts).

fiscal year 1966 values exceeded those of the preceding year for seven of the eight products. Only cantaloup imports declined, by \$1.5 million.

These 1965-66 value changes ranged from a 150-percent increase for fresh strawberries to a 20-percent decline for cantaloups. The rate of fiscal year quantity changes ranged from a 151-percent increase for tomato paste and sauce to a 14-percent decline for watermelons. For frozen and fresh strawberries, the rates of increase were similar, and averaged 69 percent; for fresh and canned tomatoes, they were 30 and 24 percent, respectively, while cantaloup and cucumber imports declined by 6 and 5 percent, respectively. Quantities of all eight products imported in fiscal year 1966 and calendar year 1965 exceeded quantities imported in calendar year 1964, the last year of the bracero program.

Price increases were most pronounced for fresh and frozen strawberries (48 and 28 percent, respectively) and for fresh tomatoes (35 percent) with lesser increases for watermelons and cucumbers; prices declined for tomato paste and sauce, canned tomatoes, and cantaloups.

The increases in imports following the termination of the bracero program should not be viewed separately. Therefore, they are presented as part of 10-year time series in table 3 and in figure 1. The trend was sharply upward during the 10-year period, from \$21 million in 1956 and 1957 to \$59 million in 1964, \$66 million in 1965, and \$95 million in the year ended June 30, 1966. However, the average annual dollar increase of \$5.0 million from 1956 to 1965 was less than the \$7 million increase from 1964 to 1965 and the \$33 million increase from fiscal year 1965 to fiscal year 1966. The average annual rate of increase was 13.7 percent for the decade 1956-65; this was slightly more than the 11.2-percent rise from 1964 to 1965, but was dwarfed by the 53-percent increase from fiscal year 1965 to fiscal year 1966.

## MEXICO IS PRINCIPAL FOREIGN SUPPLIER

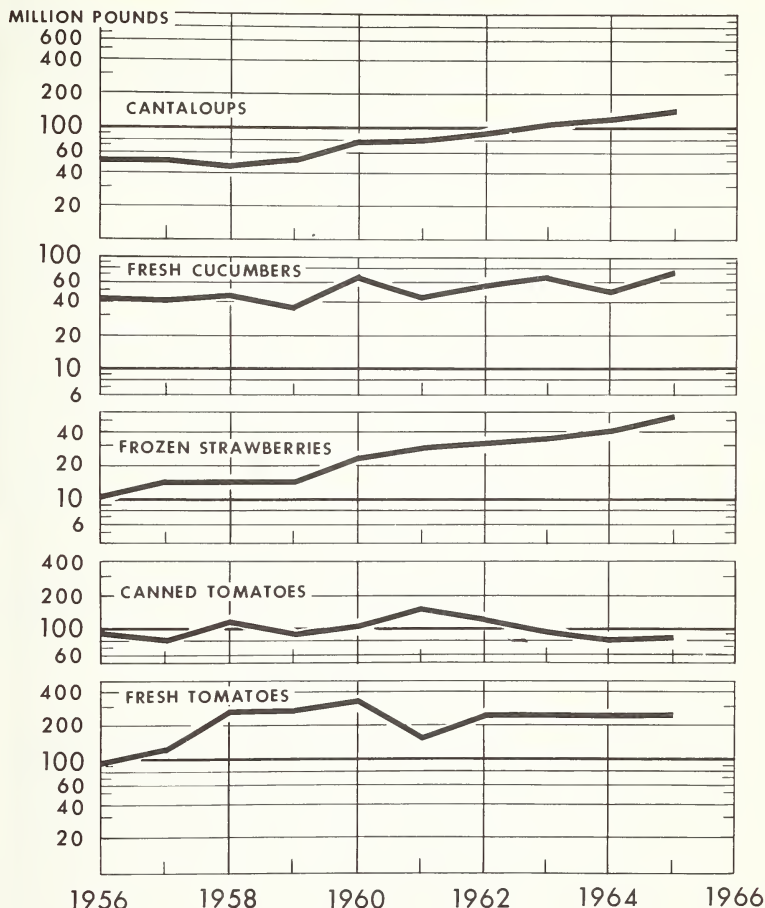
Mexico was by far the most important country of origin for aggregate imports of the eight products under discussion, and for imports of each individual product except (1) canned tomatoes and (2) tomato paste and sauce. Mexico became the leading cucumber supplier during fiscal year 1965. In 1964, 73 percent (\$42.9 million out of \$59.0 million) of the imports shown in table 3 came from Mexico (table 4). In 1965 this increased to 76 percent and in fiscal year 1966 to 81 percent. Exclusive of tomato paste and sauce and of canned tomatoes, the Mexican share was 91 percent (\$42.9 million out of \$47.1 million) in 1964, 94 percent in 1965, and 96 percent in fiscal year 1966 (tables 3 and 4).

Mexico is not only the preponderant country of origin for U.S. imports of these eight products. Since the eight products include leading fruit and vegetable items and since Mexico is also a leading source for U.S. imports of other fruits and vegetables, among them citrus, Mexico is by far the leading country of origin for U.S. imports of all fruits, vegetables, and their preparations. The development of U.S. imports from Mexico of all fruits, vegetables, and their preparations (fig. 2) is frequently discussed in the context of the bracero problem.

U.S. imports for consumption from Mexico of all fruits and preparations <sup>14</sup> during 1965 were only \$0.9 million (2.8 percent) above 1964, compared with an increase of about 25 percent per year from 1962 to 1964. This aggregation masks a significant increase in frozen strawberry imports and a sharp decline in orange and orange juice imports.

<sup>14</sup> This includes citrus, strawberries, melons, and canned pineapples, as well as several minor commodities (commodities with annual imports below \$1 million each during 1963-65).

# U. S. IMPORTS OF LEADING LABOR-INTENSIVE CROPS INCREASED DURING DECADE \*



\* THE IMPORTS OF THE 5 PRODUCTS PORTRAYED HERE ACCOUNTED FOR MOST OF THE AGGREGATE VALUE OF THE IMPORTS SHOWN IN TABLE 3.

U. S. DEPARTMENT OF AGRICULTURE

NEG. ERS 4647- 66 (7) ECONOMIC RESEARCH SERVICE

Figure 1

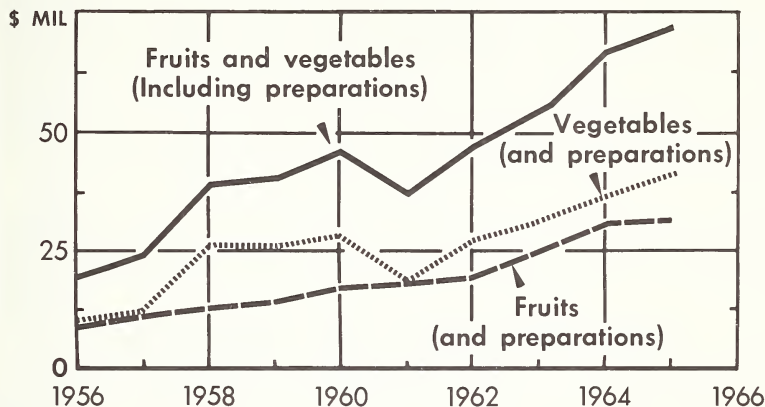
TABLE 4.--U.S. imports for consumption from Mexico, selected labor-intensive crops and their principal products, 1956-66

Year	Tomatoes		Strawberries		Cucumbers, fresh	Canta- loup	Water melons	Total
	Fresh	Paste and sauce (combined figures)	Frozen	Fresh				
VALUE								
Fiscal year:			Million dollars					
1966	49.6	1.0	14.2	1.9	3.4	6.0	1.4	77.5
1965	28.3	0.1	6.6	0.6	2.8	7.4	1.3	47.1
Calendar year:								
1965	29.4	0.4	7.8	0.8	2.8	7.4	1.3	49.9
1964	27.4	(1)	5.7	0.5	1.3	6.7	1.3	42.9
1963	20.7	(1)	4.4	0.4	1.5	4.9	1.1	33.0
1962	17.4	0.4	4.1	0.1	0.9	4.5	1.2	28.6
1961	11.6	0.3	3.7	0.1	0.7	4.0	1.2	21.6
1960	20.5	(1)	3.2	(1)	0.7	4.0	2.2	30.6
1959	18.9	(1)	1.7	(1)	0.6	2.9	1.8	25.9
1958	19.0	(1)	1.7	(1)	0.3	2.2	1.1	24.3
1957	7.4	(1)	1.4	(1)	0.2	2.3	0.5	11.8
1956	5.6	0.4	1.6	(1)	0.1	2.6	0.5	10.8
QUANTITY								
Fiscal year:			Million pounds					
1966	338.7	7.9	76.1	9.8	46.5	137.6	61.7	
1965	258.9	0.1	46.0	5.2	39.0	146.0	72.1	
Calendar year:								
1965	265.5	2.6	51.8	5.8	39.4	146.5	71.4	
1964	246.1	(1)	39.8	4.1	17.2	130.1	56.9	
1963	240.0	(1)	34.6	3.4	21.4	110.4	62.8	
1962	233.2	5.0	32.3	0.9	15.8	97.8	49.5	
1961	156.1	3.7	29.8	0.6	10.4	79.6	45.1	
1960	251.8	0.3	25.0	(1)	8.7	79.3	76.1	
1959	240.4	(1)	14.1	(1)	6.6	56.2	57.7	
1958	226.2	(1)	14.4	(1)	3.0	43.6	43.2	
1957	100.4	(1)	13.7	(1)	2.2	49.7	24.4	
1956	63.0	2.7	11.2	(1)	0.8	51.9	36.9	

<sup>1</sup> Nil or negligible.

For sources see table 3.

## VALUE OF FRUIT AND VEGETABLE IMPORTS FROM MEXICO



SOURCE FOREIGN AGRICULTURAL SERVICE BASED ON U.S. BUREAU OF THE CENSUS REPORTS.

U.S. DEPARTMENT OF AGRICULTURE

NEG ERS 4828.66(10)

ECONOMIC RESEARCH SERVICE

Figure 2

U.S. imports from Mexico of vegetables and their preparations, on the other hand, increased by \$5.2 million from 1964 to 1965, almost the same as the \$5.5 million increase from 1963 to 1964.<sup>15</sup> Tomatoes and cucumbers contributed two-thirds of these increases.

### EXPORTS RISE MODERATELY

Exports of the "bracero" crops (other than citrus products, which are discussed separately) amounted to \$60 million both in 1964 and 1965; but fiscal year 1966 exports amounted to \$63 million, \$4 million (7.5 percent) above a year earlier (table 5). This increase in the value of exports reflects the net effect of a 12.8-percent average increase in the price of the products exported and a 4.7-percent average decline in their quantity.<sup>16</sup> Table 5 contains time series of the values and quantities exported for the eight products for which imports are shown in table 3. Tomatoes and tomato product exports are summarized in terms of their fresh tomato equivalent. Fresh and frozen strawberry exports are also aggregated. In addition to the eight products, asparagus (canned and fresh),

<sup>15</sup> In addition to the vegetables mentioned in table 4 (tomatoes and cucumbers), this includes green beans, onions, and peppers—each with annual imports above \$1 million during 1963–65—as well as several minor commodities including asparagus, celery, and lettuce.

<sup>16</sup> The rates of price and quantity change were obtained by calculating quantity and price indexes by Fisher's "Ideal" formula.

TABLE 5.--U.S. exports of domestic, labor-intensive crops and their principal products, 1956-66

Year	Tomatoes and products, fresh equivalent <sup>1</sup>	Strawberries <sup>2 3</sup>	Asparagus <sup>3 4</sup>	Lettuce <sup>5</sup>	Celery <sup>6</sup>	Cucumbers <sup>7 8</sup>	Watermelons <sup>8</sup>	Cantaloupes <sup>9</sup>	Total
VALUE									
Fiscal year:					Million dollars				
1966.....	19.6	4.4	12.8	12.1	7.1	3.0	2.5	1.9	63.5
1965.....	20.6	4.0	14.5	8.8	4.8	2.5	2.4	1.4	59.0
Calendar year:									
1965.....	20.5	3.9	13.8	9.7	5.4	2.8	2.4	1.9	60.5
1964.....	20.1	4.3	16.6	8.3	4.7	2.4	2.3	1.2	59.9
1963.....	17.8	4.3	15.9	7.6	4.4	2.4	2.0	1.5	55.9
1962.....	15.4	4.4	14.8	7.9	5.1	2.7	1.8	1.3	53.4
1961.....	17.2	5.1	11.3	6.1	3.9	2.6	2.1	1.5	49.8
1960.....	16.8	4.3	10.5	6.4	3.8	2.5	1.6	1.4	47.3
1959.....	18.0	5.0	6.5	6.5	3.8	2.4	1.5	1.4	45.1
1958.....	19.0	5.0	9.9	6.1	5.1	2.6	1.1	1.2	50.0
1957.....	24.5	4.3	7.6	5.6	4.5	3.1	1.4	1.3	52.3
1956.....	22.4	4.8	6.8	5.9	4.1	2.4	1.1	1.1	48.6
QUANTITY									
Fiscal year:					Million pounds				
1966.....	243.9	19.2	44.0	221.5	125.8	44.0	91.7	34.5	
1965.....	292.7	20.5	60.7	170.1	97.0	35.4	81.7	27.8	
Calendar year:									
1965.....	274.8	18.1	53.3	180.8	102.9	42.5	83.5	33.8	
1964.....	277.2	21.9	67.8	175.9	86.9	34.7	67.7	25.4	
1963.....	259.1	22.8	67.1	164.4	100.2	37.0	84.2	29.9	
1962.....	203.5	23.8	68.7	163.4	82.2	36.2	64.3	30.2	
1961.....	249.8	28.0	50.1	159.2	92.0	38.3	82.7	29.3	
1960.....	264.6	21.3	56.0	145.9	29.3	37.0	83.6	28.2	
1959.....	309.3	24.6	53.1	152.6	92.9	31.0	64.7	29.0	
1958.....	344.8	27.2	34.5	144.7	88.3	36.6	64.1	27.6	
1957.....	455.7	24.1	44.6	140.3	89.0	43.0	62.4	23.7	
1956.....	406.2	22.3	37.5	128.3	88.1	28.2	61.2	25.7	

<sup>1</sup> From table 13. <sup>2</sup> From table 14. <sup>3</sup> Canadian dollars converted to U.S. dollars at average annual exchange rates furnished by the Federal Reserve Board. <sup>4</sup> Sum of U.S. exports of canned asparagus and Canadian imports from the United States of fresh asparagus, as shown in table 16. <sup>5</sup> For source see table 22. <sup>6</sup> For source see table 24. <sup>7</sup> Sum of Canadian imports from the United States of fresh cucumbers and U.S. exports of cucumber pickles, as shown in table 17. <sup>8</sup> For source see table 21. <sup>9</sup> For source see table 20.



celery, and lettuce are included because significant quantities of these products were exported.

Asparagus exports dropped from \$16.6 million in 1964, the highest value shown, to \$12.8 million in fiscal year 1966, a 23-percent decline. The decline in the quantity of asparagus exports during that period was even greater--28 percent. Sizeable increases in lettuce, celery, cucumber, watermelon, and cantaloup exports more than offset the decline in asparagus exports. Strawberry exports during June-December 1965 were significantly below year earlier levels, but an increase of such exports in January-May 1966 over a year earlier caused fiscal year 1966 exports to be above the very low level of calendar year 1965 exports. The value of tomato and tomato product exports has been relatively stable since 1964; but the quantity (fresh tomato equivalent) dropped by 49 million pounds (17 percent) from fiscal year 1965 to fiscal year 1966.

## IMPORT-EXPORT RELATIONSHIP

From 1956 to fiscal year 1966, exports of the commodities shown in table 5, in the aggregate, increased in value by only 31 percent. The relationship between imports and exports changed drastically, from a net export position of \$28 million in 1956 to a net export position of \$1 million in 1964, and a net import position of \$32 million in fiscal year 1966.

## CITRUS IMPORTS ARE A FUNCTION OF WEATHER

In 1964, 10.9 percent of all foreign seasonal hired labor was employed on citrus crops, and foreign labor made up 21.6 percent of the total seasonal hired labor for these crops (table 1). They differ from the other crops discussed by being tree crops. Several years are required between the planting of citrus trees and the first harvest. When the economic outlook is doubtful, growers are more likely to continue to produce than to pull out or even to abandon trees. Thus, production changes from 1964 to 1965 were even less related to a fundamental change such as the termination of the bracero program than changes in the production of annual crops might be.

Citrus crops and their products are classified into a large number of foreign trade items. Their inclusion would dwarf all other items shown in table 5 on exports and would significantly affect table 3 on imports. Thus, data on the foreign trade in principal citrus products are shown separately in tables 6, 7, and 8, and were excluded from tables 3, 4, and 5.

Imports increased greatly in response to the two poor domestic crops, 1962/63 and 1963/64, and they declined drastically in 1965 following the recovery of domestic production. In fiscal year 1966, they dropped to the average 1959-62 level. Inversely, exports declined in 1963 and 1964, again reflecting poor domestic production. In 1965, as domestic production recovered, exports increased, and they continued to increase in fiscal year 1966.

The trade data presented in table 6 are not reliable enough to permit the calculation of "apparent consumption" by taking production plus imports minus exports. A leading import item, canned mandarin oranges, has been excluded from tables 6, 7, and 8 because it is a specialty item. Its importation (from Japan and Taiwan) has greatly increased over the years with no apparent relationship to domestic production. Lime oil imports were similarly omitted, as were several other items, because of their relatively small magnitude. The import and export aggregations are not only incomplete, but the conversion of juice gallonages to fresh fruit equivalents involved necessarily rough estimates. However, the foreign trade data introduced do serve to show the foreign trade response to the two poor crop years in the United States and to the subsequent recovery.

TABLE 6.--U.S. total citrus crop production and foreign trade aggregates of principal products, 1956-66

Year	Production <sup>1</sup>	Exports <sup>2</sup>	Imports <sup>3</sup>
----- Million pounds -----			
1966.....	17,552	<sup>4</sup> 1,511	<sup>4</sup> 76
1965.....	15,318	1,371	136
1964.....	12,495	1,190	293
1963.....	12,964	1,238	261
1962.....	17,200	1,557	71
1961.....	15,090	1,550	62
1960.....	15,876	1,422	102
1959.....	16,224	1,461	70
1958.....	14,094	1,355	57
1957.....	16,556	1,720	34
1956.....	16,350	1,786	81

<sup>1</sup> Data apply to the season ending in the spring of the year indicated, From Annual Reports of the Crop Reporting Board; Agricultural Statistics, 1965; and Citrus Fruits, Crop Rptg. Bd., Statis. Rptg. Serv., U.S. Dept. Agr., Oct. 1966. Data include quantities reported "not marketed" by the Crop Reporting Board. Such quantities were 30, 52, and 42 million pounds in 1966, 1965, and 1964, respectively (0.2 percent in 1966 and 0.3 percent in both 1965 and 1964).

<sup>2</sup> Fresh fruit equivalent of items shown in table 7.

<sup>3</sup> Fresh fruit equivalent of items shown in table 8.

<sup>4</sup> Fiscal year.

TABLE 7.--U.S. exports of principal citrus products, 1956-66

Year	Oranges and tangerines	Grape-fruits	Lemons and limes	Orange juice <sup>1</sup>	Grapefruit juice <sup>1</sup>	Total
----- Million pounds -----						
Fiscal year:						
1966.....	588	205	264	366	88	1,511
1965.....	442	182	197	311	113	1,245
Calendar year:						
1965.....	505	196	222	337	111	1,371
1964.....	426	166	229	291	78	1,190
1963.....	354	159	222	377	126	1,238
1962.....	439	225	152	563	178	1,557
1961.....	437	223	222	506	162	1,550
1960.....	455	155	184	522	106	1,422
1959.....	582	177	152	417	133	1,461
1958.....	355	133	248	507	112	1,355
1957.....	719	182	170	516	133	1,720
1956.....	898	177	149	429	133	1,786

<sup>1</sup> Concentrates converted to single strength equivalent by coefficients 4.3 for orange juice and 5.0 for grapefruit juice, based on Tariff Commission estimates. Single-strength equivalents converted to fresh equivalents by coefficients 16 pounds per gallon of orange juice and 18 pounds per gallon of grapefruit juice, from Conversion Factors and Weights and Measures for Agricultural Commodities and Their Products, U.S. Dept. Agr. Statis. Bul. 362, June 1965, p. 56.

Basic data from U.S. Bureau of the Census, Reports FT 410 Annual and, for fiscal years, Agriculture Specialist Reports.



TABLE 8.--U.S. imports of selected citrus items from all origins and from Mexico, 1956-66<sup>1</sup>

Year	From all origins				From Mexico		
	Oranges, fresh	Orange juice	Lemon juice	Total	Oranges, fresh	Orange juice	Total
Fiscal year:	----- Million pounds -----						
1966 .....	59	17	(2)	76	47	0	47
1965 .....	105	90	8	203	96	7	103
Calendar year:							
1965 .....	79	57	(2)	136	70	4	74
1964 .....	126	142	25	293	117	68	185
1963 .....	123	78	60	261	113	26	139
1962 .....	29	18	24	71	28	18	46
1961 .....	26	32	4	62	19	32	51
1960 .....	27	30	45	102	22	30	52
1959 .....	59	7	4	70	25	7	32
1958 .....	52	1	4	57	21	1	22
1957 .....	2	1	31	34	2	(2)	2
1956 .....	6	4	71	81	6	4	10

<sup>1</sup> Canned mandarin oranges, in recent years the leading citrus import item in value (\$14.4 million for 70.8 million lb. in 1965) omitted. Juice single strength equivalent gallonages, as reported by the Census Bureau, converted to fresh fruit equivalent by coefficients 16 for orange juice and 26 for lemon juice, as shown in Conversion Factors, op. cit. Lemon juice imports were substantially all from Italy. Basic data from U.S. Bureau of the Census, Reports FT 110, FT 125, FT 246, and, for fiscal years, Agriculture Specialist Reports.

<sup>2</sup> Negligible.

The fresh orange and orange juice import data from Mexico shown in table 8, like the overall citrus import figures, reflect the poor U.S. crops during 1962/63 and 1963/64 and the 1964/65 recovery. Moreover, Mexico had to yield its place as the principal source of imported orange juice to Brazil in 1965. There were no orange juice imports from Mexico during the fiscal year 1966.

In summary, citrus imports and exports have changed in response to domestic production changes, and these, in turn, have been functions of the weather. In 1964/65 and 1965/66 a recovery from the two preceding poor crop years occurred with exports up and imports down.

## ANALYSIS OF INDIVIDUAL CROPS

Following is a detailed analysis of the individual bracero crops in which the relationship of imports and exports to production and apparent consumption is shown.

### Tomatoes

The quantity of fresh tomato imports into the United States reached its highest pre-1966 level in 1960; in 1965 imports were about equal to the 1958-59 average. In recent years, virtually all fresh tomato imports have originated in Mexico. Canned tomatoes and tomato paste and sauce are also imported in significant quantities; these products are imported primarily from Italy. Almost three times as much tomato paste and sauce was imported in fiscal year 1966 as in 1964, but this did not significantly exceed 1961

imports. Canned tomato imports in 1964 and in fiscal year 1965 were at a long-time low, from which they subsequently recovered. The combined fresh tomato equivalent of imports of fresh tomatoes, tomato paste and sauce, and canned tomatoes was 656 million pounds in fiscal year 1966, up 203 million pounds or 45 percent from a year earlier and 13 percent above the previous record attained in calendar year 1961.<sup>17</sup> The value of tomato and tomato product imports rose even more sharply, by 62 percent, from \$40.7 million in fiscal year 1965 to \$66.0 million in fiscal year 1966. A 35-percent increase in the import price of fresh tomatoes was a more significant factor than a 12-percent average price decline for tomato paste and sauce and canned tomatoes.

Fresh tomato imports are dutiable at 2.1 cents per pound during 7 months of the year and at 1.5 cents during the other 5 months. Although the seasonal duty differential would be expected to encourage imports during the lower-duty period, in 1965<sup>18</sup> lower-duty period imports declined to 94 million pounds, only 36 percent of total fresh tomato imports compared with 45 percent during 1961-64 (table 9). Sixty-three percent of imports entered during the principal higher duty period from March through June and only negligible quantities entered from July through mid-November. Imports in the higher duty

TABLE 9.--U.S. imports for consumption of fresh tomatoes by duty seasons, 1961-66

Year ending November 14	Quantity			Value		
	Higher duty periods <sup>1</sup>	Lower duty periods <sup>2</sup>	Total	Higher duty periods <sup>1</sup>	Lower duty periods <sup>2</sup>	Total
	----- Million pounds -----			----- Million dollars -----		
1961.....	96	107	203	7.3	7.7	15.0
1962.....	133	99	232	10.2	6.9	17.1
1963.....	129	109	238	8.7	11.9	20.6
1964.....	149	103	252	16.3	11.7	<sup>3</sup> 27.9
1965.....	169	94	<sup>3</sup> 262	19.0	9.8	28.8
1966 <sup>4</sup> .....	210	127	337	31.3	18.4	<sup>3</sup> 49.6
	----- Percent of 1963 -----			----- Percent of 1963 -----		
1961.....	74	98	85	84	65	73
1962.....	103	91	97	117	58	83
1963.....	100	100	100	100	100	100
1964.....	116	94	106	187	98	135
1965.....	131	86	110	218	82	140
1966 <sup>4</sup> .....	163	117	142	360	155	241

<sup>1</sup> The 2.1¢ per pound duty is levied March 1-July 14 and September 1-November 14.

<sup>2</sup> The 1.5¢ per pound duty is levied July 15-August 31 and November 15-end of February.

<sup>3</sup> Due to rounding, totals are not the exact sum of preceding data.

<sup>4</sup> November 14, 1965 to July 14, 1966; July 15-November 14 imports believed to be very small.

Based on data in Foreign Agricultural Trade of the United States, Econ. Res. Serv., U.S. Dept. Agr., except 1961 and 1962 data, which are from a U.S. Tariff Commission document.

<sup>17</sup> In this aggregation, canned tomatoes were weighted by 1.561, tomato paste and sauce by 4.0, and fresh tomatoes by 1.0, based upon Conversion Factors and Weights and Measures for Agricultural Commodities and Their Products, U.S. Dept. Agr., 1952, and revision, Statis. Bul. 362, 1965.

<sup>18</sup> Year ending November 14 for all data mentioned from here to end of paragraph.

period increased not only relatively, from 55 percent of the total in 1961-64 to 64 percent in 1965, but also absolutely from 127 to 169 million pounds. Assuming that imports from July through mid-November 1966 were again negligible, the same relationship of lower duty period imports to higher duty period imports continued in 1966, but imports during the principal lower duty period of 1966 increased to 127 million pounds and during the principal higher duty period they increased to 210 million pounds.

Mexican tomato production has risen since 1956 with but few interruptions; but the 1.7 percent increase from 1964 to 1965 was much less than earlier year-to-year increases (table 10).

U.S. commercial production of tomatoes for the fresh market was rather stable from 1961 to 1965 (figure 3). A recent minimum was reached in 1963<sup>19</sup> when production dropped to 97.8 percent of the 5-year average. In all other years, production differed by 1 percent or less from the average (table 11). This stability was the net result of declining acreage and increasing yield. From 1964 to 1965, harvested acreage declined 1.1 percent and from 1965 to 1966, 1.9 percent. These rates must be seen as continuation of a long-term trend. The acreage decline from 1961 to 1964 was 3.3 percent.

Domestic production of tomatoes for the fresh market during the lower duty periods was 41 percent of total production during 1961-64 and declined to 38 percent in the year ending November 14, 1966. Relative to 1961-65 average production during the lower duty periods, the decline was from 104.6 percent in 1961 to 96.3 percent in 1964 and to about 94 percent in both 1965 and 1966. This is surprising, since imports during the lower duty periods also declined, from 45 percent of total imports in 1961-64 to 37 percent in 1966. Production during the higher duty periods, on the other hand, climbed from less than 100.0 percent of the 1961-65 average in each year, 1961 to 1963, to above 100 percent since 1964. Imports during the higher duty periods increased significantly, as shown in table 9.

Domestic tomato production for processing amounted to about 9.0 billion pounds in 1965, almost four and one-half times the quantity produced for the fresh market; but the farm value of production for the fresh market exceeded that for processing. Tomato production for processing varies considerably from year to year. Acreage harvested was 9.5

TABLE 10.--Tomato production in Mexico, 1956-65

Year	1,000 metric tons	Million pounds	Change from preceding year, percent
1956. ....	372	820	---
1957. ....	341	752	-8.3
1958. ....	355	783	+4.1
1959. ....	372	820	+4.7
1960. ....	389	858	+4.6
1961. ....	453	999	+16.4
1962. ....	433	955	-4.4
1963. ....	464	1,023	+7.1
1964. ....	482	1,063	+3.9
1965. ....	490	1,080	+1.7

Source: Indices of Agricultural Production for the 20 Latin American Countries, Revised 1954 through 1964, preliminary 1965. ERS-Foreign 44, Econ. Res. Serv., U.S. Dept. Agr., revised Jan. 1966.

<sup>19</sup> Year ending November 14 for all data from here to end of next paragraph.

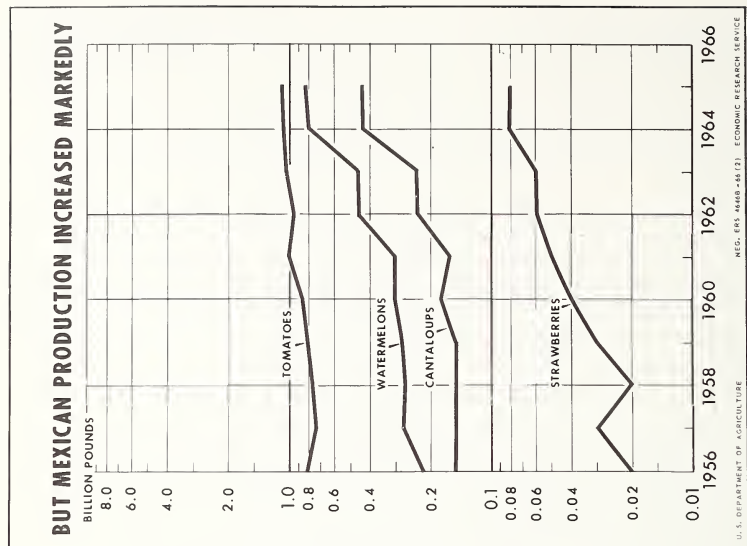
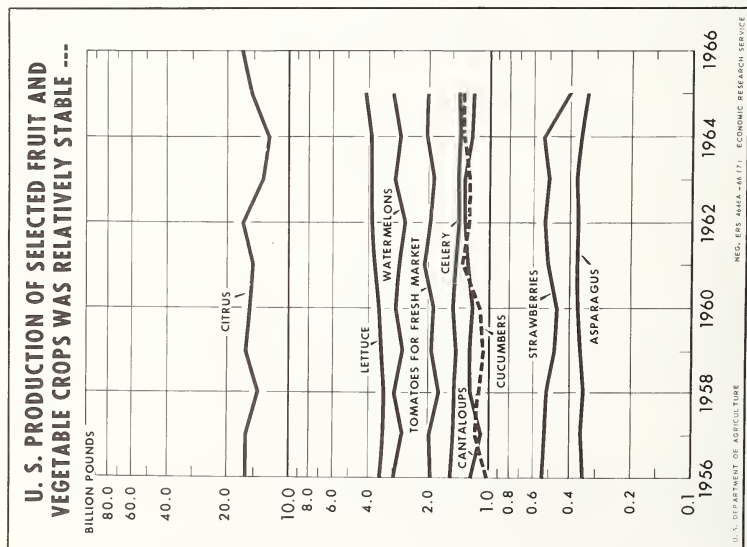


Figure 3



TABLE 11.--Commercial production of tomatoes for the fresh marked in the United States, by duty periods, 1961-66<sup>1</sup>

Year ending November 14	Periods of 2.1¢ per pound duty <sup>2</sup>	Periods of 1.5¢ per pound duty <sup>3</sup>	Total	Periods of 2.1¢ per pound duty	Periods of 1.5¢ per pound duty	Total
	----- Million pounds -----			-- Percent of 1961-1965 Average --		
1961.....	1,212.6	862.0	2,074.6	98.8	104.6	101.1
1962.....	1,183.1	876.3	2,059.4	96.4	106.3	100.4
1963.....	1,193.3	814.1	2,007.4	97.2	98.8	97.8
1964.....	1,262.1	793.8	2,055.9	102.8	96.3	100.2
1965.....	1,287.8	773.9	2,061.7	104.9	93.9	100.5
Average, 1961-65.....	1,227.8	824.0	2,051.8	100.0	100.0	100.0
1966.....	1,262.7	775.4	2,038.1	102.8	94.1	99.3

<sup>1</sup> Basic data from: Vegetables - Fresh Market, Annual Summaries, VG 2-2, 1964 and 1965; and Vegetables, Fresh Market, VG 2-1, Sept. 9 and Oct. 7, 1966; Crop Rptg. Bd., Statis. Rptg. Serv., U.S. Dept. Agr. 1961 and 1962 data, also based on Crop Reporting Board data, from a U.S. Tariff Commission document. Data were recast as explained in footnotes 2 and 3. The following quantities (in millions of pounds) not marketed are included: 1962, 0.1; 1963, 0.1; 1964, 0.1; 1965, 8.8.

<sup>2</sup> Levied Mar. 1-July 14 and Sept. 1-Nov. 14. To estimate production during these periods, the following portions of production during each season were added: One-third of winter (Jan.-Mar.), all of early spring (Apr. 1-May 15), all of late spring (May 16-June 30), one-third of early summer (July 1-Aug. 15), two-thirds of late summer (Aug. 16-Sept. 30), and all of early fall (Oct. 1-Nov. 15).

<sup>3</sup> Levied July 15-Aug. 31 and Nov. 15-Feb. 28 or 29. To estimate production during these periods, the following portions of production each season were added: Two-thirds of early summer (July 1-Aug. 15), one-third of late summer (Aug. 16-Sept. 30), all of late fall (Nov. 16-Dec. 31), and two-thirds of winter (Jan.-Mar.)

percent less in 1965 than in 1964; but very high yields kept the production decline to 3.6 percent. In 1966, a 13-percent acreage increase and an 8-percent decline in yield resulted in a 4.5 percent production increase to 9.4 billion pounds.<sup>20</sup> Since tomato imports are generally for the fresh market and since import and export data for tomato products are presented, tomato production for processing is not further discussed.

Fresh tomato exports during 1963-65 averaged about 100 million pounds per year, exceeded the level of exports during 1959-1962, but were less than the 1956-1958 average (table 12). Imports were rather stable from 1958 through 1965, except for unusually high and low imports in 1960 and 1961 respectively. They averaged 252 million pounds a year from 1958 to 1965, but climbed to 341 million pounds during fiscal year 1966. Apparent consumption increased only slightly through 1965 but indications are that the rate of apparent consumption increased more pronouncedly during 1966: Production during the year ending November 14, 1966, is indicated as 23.6 million pounds or about 1 percent below a year earlier (table 11), but imports exceeded exports by 241.7 million pounds in fiscal year 1966 compared with an excess of only 156.3 million pounds a year earlier. These figures imply an increase in apparent consumption of 61.8 million pounds, an increase which would tend to offset the slight decline in per capita apparent consumption which seems to have taken place in recent years. The percentage which imports were of consumption also increased from 1964 to 1965 but, at 12.1 percent, it was only insignificantly above the 8-year average of 11.85 percent.

<sup>20</sup> Vegetables - Processing, Vg 3-1, Oct. 11, 1966, Crop Rptg. Bd., Statis. Rptg. Serv.

TABLE 12.--Tomatoes for fresh market: U.S. production, imports, exports, and apparent consumption, 1956-65

Year	Production <sup>1</sup>	Imports	Exports	Apparent consumption <sup>2</sup>	Imports ÷ consumption
Fiscal year:	----- Million pounds -----				Percent
1966 .....	---	341,1	99,4	---	---
1965 .....	---	261,9	105,6	---	---
Calendar year:					
1965 .....	2,058,8	269,0	97,9	2,229,9	12,1
1964 .....	2,063,5	249,2	102,4	2,210,3	11,3
1963 .....	1,913,4	242,0	101,1	2,054,3	11,8
1962 .....	1,982,2	236,2	84,3	2,134,1	11,1
1961 .....	2,115,7	176,2	97,5	2,194,4	8,0
1960 .....	1,906,3	312,7	73,1	2,145,9	14,6
1959 .....	1,959,1	262,6	88,8	2,132,9	12,3
1958 .....	1,792,2	264,5	119,1	1,937,6	13,6
1957 .....	2,014,7	119,6	95,2	2,039,0	5,9
1956 .....	1,976,8	95,0	132,6	1,939,2	4,9

<sup>1</sup> Quantities which the Crop Reporting Board shows as "not marketed" are excluded.

<sup>2</sup> Production plus imports minus exports.

Sources: Vegetables--Fresh Market, 1965; Agricultural Statistics 1965; Foreign Agricultural Trade of the United States; Bureau of the Census, Reports FT 110, FT 125, and FT 410, and, for fiscal year 1966, Agriculture Specialist Reports.

Since 1961, the value of exports of tomato products has about equaled the value of fresh tomato exports, and the fresh tomato equivalent of tomato product exports until recently amounted to about one and three-fourths of the quantity of fresh tomato exports. In fiscal year 1966, however, export quantities of all five tomato products declined markedly and their fresh tomato equivalent dropped to 144 million pounds, less than one and one-half the quantity of fresh tomato exports (table 13). In the late 1950's tomato product exports were substantially larger, averaging 270 million pounds of fresh tomato equivalent (1956-59), almost twice as much as in fiscal year 1966. These exports are now less than tomato product imports; they exceeded imports before 1960.<sup>21</sup>

## Strawberries

Imports of frozen and fresh strawberries doubled between calendar year 1964 and fiscal year 1966 (table 14). Nearly all U.S. imports originated in Mexico. While U.S. imports from Mexico in fiscal year 1966 exceeded those of the previous fiscal year by 35 million pounds, Mexican strawberry production during the season beginning November 1965 increased only 26 million pounds, according to a first estimate (table 15). This estimate of production implies that U.S. imports were increased in part by a reduction in other outlets, namely exports to Canada and Mexican domestic consumption. It is more likely that the final Mexican production figure for 1966 will be above the 110 million pound estimate shown in table 15.

<sup>21</sup> The fresh tomato equivalent of tomato product imports is not shown. It was calculated by adding 1,561 times the pounds of canned tomatoes and 4,000 times the pounds of tomato paste and sauce shown in table 3. See Conversion Factors, op. cit.

TABLE 13.--U.S. exports of tomatoes and tomato products, 1956-66

Year	Fresh tomatoes		Canned tomatoes		Tomato purée and paste		Tomato sauces	
	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value
	Mil. lb.	Mil. dol.	Mil. lb.	Mil. dol.	Mil. lb.	Mil. dol.	Mil. lb.	Mil. dol.
<b>Fiscal year:</b>								
1966.....	99.4	10.1	11.6	1.5	11.5	2.8	2.4	0.4
1965.....	105.6	9.8	18.6	2.0	13.6	2.9	3.6	0.5
<b>Calendar year:</b>								
1965.....	97.9	9.7	18.4	2.1	13.7	3.1	3.5	0.5
1964.....	102.4	10.2	12.2	1.3	12.2	2.5	1.8	0.2
1963.....	100.1	9.0	4.3	0.5	15.8	3.2	0.9	0.1
1962.....	84.3	8.1	3.4	0.4	10.0	2.2	1.4	0.2
1961.....	97.5	8.5	4.8	0.5	15.1	3.0	1.2	0.2
1960.....	73.1	6.8	11.3	1.2	19.9	3.5	1.4	0.2
1959.....	88.8	6.9	9.4	1.0	20.6	3.5	9.2	1.3
1958.....	119.1	7.8	6.1	0.7	18.0	2.9	12.2	1.5
1957.....	95.2	8.1	13.0	1.4	29.0	4.5	26.8	3.0
1956.....	132.6	9.1	18.0	1.8	22.1	3.7	16.3	1.8
	Catsup and chili sauce		Canned tomato juice		All tomato products, fresh equivalent <sup>1</sup>			
	Quantity	Value	Quantity	Value	Quantity <sup>2</sup>	Value		
	Mil. lb.	Mil. dol.	Mil. lb.	Mil. dol.	Mil. lb.	Mil. dol.		
<b>Fiscal year:</b>								
1966.....	14.6	2.6	3 21.0	2.3	144.5	9.6		
1965.....	16.5	2.6	3 30.4	2.9	187.1	10.9		
<b>Calendar year:</b>								
1965.....	15.6	2.6	3 25.4	2.6	176.9	10.8		
1964.....	16.4	2.5	36.7	3.4	174.8	9.9		
1963.....	15.0	2.4	28.4	2.6	159.0	8.8		
1962.....	13.2	2.3	21.8	2.2	119.1	7.3		
1961.....	14.2	2.5	26.1	2.5	152.3	8.7		
1960.....	15.5	2.5	28.9	2.6	191.5	10.0		
1959.....	15.8	2.5	31.5	2.8	220.5	11.1		
1958.....	13.9	3.9	2.2	3.9	225.7	11.2		
1957.....	12.4	1.9	65.1	5.5	360.5	16.4		
1956.....	12.8	2.9	43.6	3.9	273.6	13.3		

<sup>1</sup> Fresh tomatoes excluded. <sup>2</sup> Pounds canned tomatoes converted by coefficient 1.561; purée and paste by 4.382, sauces by 3.101, catsup by 2.469, juice by 1.528. <sup>3</sup> Million gallons times 8.5. See Conversion Factors, op. cit.

Source: U.S. Bureau of the Census, Reports FT 410.

TABLE 14.--Strawberries: U.S. production, imports, exports, and apparent consumption, 1956-66

Year	Production <sup>1</sup>	Imports <sup>2</sup>	Exports <sup>2 3</sup>	Apparent consumption <sup>4</sup>
For processing				
Fiscal year:	----- Million pounds -----			
1966. ....	---	79.5	2.7	---
1965. ....	---	47.2	1.0	---
Calendar year:				
1965. ....	179.9	53.9	2.6	231.2
1964. ....	251.8	40.8	0.9	291.7
1963. ....	214.9	35.1	2.4	247.6
1962. ....	229.7	32.3	2.5	259.5
1961. ....	221.5	29.8	3.0	248.3
1960. ....	228.9	25.0	3.0	250.9
1959. ....	240.9	14.1	5.3	249.8
1958. ....	266.0	14.4	6.8	273.6
1957. ....	267.9	13.8	3.9	277.8
1956. ....	307.0	11.5	7.1	311.4
For fresh use				
Fiscal year:				
1966. ....	---	10.4	16.5	---
1965. ....	---	5.9	19.5	---
Calendar year:				
1965. ....	250.9	6.4	15.5	241.8
1964. ....	298.7	5.2	21.0	282.9
1963. ....	296.0	3.6	20.4	279.2
1962. ....	297.1	1.0	21.3	276.8
1961. ....	288.7	0.7	25.1	264.3
1960. ....	237.9	0.7	18.3	220.3
1959. ....	236.3	0.2	19.3	217.2
1958. ....	264.7	(5)	20.4	244.3
1957. ....	276.3	(5)	20.2	256.1
1956. ....	241.1	0.1	15.2	226.0
Total				
Fiscal year:				
1966. ....	<sup>6</sup> 473.7	90.0	19.2	---
1965. ....	---	53.1	20.5	---
Calendar year:				
1965. ....	430.8	60.3	18.1	473.0
1964. ....	550.5	46.0	21.9	574.6
1963. ....	510.9	38.7	22.8	526.8
1962. ....	526.8	33.3	23.8	536.3
1961. ....	510.2	30.5	28.1	512.6
1960. ....	466.8	25.7	21.3	471.2
1959. ....	477.2	14.3	24.6	467.0
1958. ....	530.7	14.4	27.2	517.9
1957. ....	544.2	13.8	24.1	533.9
1956. ....	548.1	11.6	22.3	537.4

<sup>1</sup> Quantities which the Crop Reporting Board shows as "not marketed" are excluded. <sup>2</sup> Imports and exports for processing refer to frozen strawberries. <sup>3</sup> Exports are Canadian imports from the U.S. <sup>4</sup> Production plus imports minus exports. <sup>5</sup> Less than 0.05. <sup>6</sup> Production relates to calendar year; harvest completed August 1. Quantities "not marketed", if any, included.

Sources: Agricultural Statistics 1965; Vegetables--Fresh Market, 1965 annual summary and monthly report Oct. 7, 1966. U.S. Bur. of the Census, Reports FT 110 and FT 125. Foreign Agriculture Circular, FDAP 1-61 and Trade of Canada, Imports, Dominion Bur. Statis.



TABLE 15.--Strawberry production in Mexico, 1956-66

Year <sup>1</sup>	Metric tons	Million pounds	Change from preceding year (percent)
1956. ....	8,934	19.7	---
1957. ....	12,100	26.7	+35.4
1958. ....	9,900	21.8	-18.2
1959. ....	13,869	30.6	+40.1
1960. ....	20,070	44.2	+44.7
1961. ....	23,024	50.8	+14.7
1962. ....	25,492	56.2	+10.7
1963. ....	27,669	61.0	+8.5
1964. ....	34,140	75.3	+23.4
1965. ....	38,100	84.0	+11.6
1966 estimated. ....	49,900	110.0	+31.0

<sup>1</sup> The harvest starts in Nov. of the preceding year and ends in the spring of the year indicated.

Source: U.S. Agricultural Attache Reports and Foreign Agriculture Circular, Strawberries, FDAP 2-66, Apr. 1966.

The duty on frozen strawberries is not seasonally differentiated. The seasonally lower duty (0.5 cent per pound) on fresh strawberries, from June 15 through September 15 was adopted as a trade concession to Canada. Imports from Canada during that season have amounted to only about two-thirds of a million pounds in recent years. Moreover, imports during that season in 1964 amounted to only 13 percent of calendar year imports, and in 1965, to only 9 percent.

Total U.S. strawberry production, for fresh use and for processing combined, declined 22 percent, from 551 million pounds in 1964 to 431 million pounds in 1965. Planted acreage, harvested acreage, percentage of planted acreage harvested, and yield per acre all dropped, with yield per acre showing the worst decline, 9.1 percent, but still 7.9 percent above the 1959-1963 average yield. In 1966, harvested acreage was almost the same as in 1965; yield was up 2.9 percent and production, including quantities not marketed, if any, was 473.7 million pounds, 2.8 percent above 1965 production. Production not marketed in 1965 was 30.2 million pounds. It is unlikely that crop abandonment on such a large scale took place again in 1966. Thus, production in 1966 (excluding quantities not marketed) may be substantially above 1965.

Production for fresh use declined by 8.6 percent from 1964 to 1965, after it had held constant around 297 million pounds for 3 years.

Production of strawberries for processing in 1965 (180 million pounds) was by far the lowest of the decade and so was apparent consumption, in spite of record high imports amounting to 23.3 percent of apparent consumption compared with 14.0 percent in 1964. Imports of fresh strawberries have increased considerably but are still a small portion of apparent consumption. In 1965 total imports (both fresh and frozen) accounted for 12.7 percent of apparent consumption, up from 8.0 percent in 1964 and less than that in earlier years.

U.S. exports of fresh strawberries declined after 1961. In 1965, the Census Bureau reported fresh strawberry exports for the first time as a separate item and showed such exports to Canada as only 11.6 million pounds, much less than the 15.5 million pounds

which Canada reported as imports from the United States. For the fiscal year 1966, the Census Bureau reported such exports to Canada as 12.5 million pounds, compared with Canadian reports of imports from the United States of 16.5 million pounds. U.S. exports of frozen strawberries declined in 1964, but recovered from the low level of that year.

## Asparagus

Asparagus production in the United States declined severely in 1965, for the second successive year (table 16). After production had been maintained at the approximate annual level of 370 million pounds during 1960-63, it dropped to 328 million pounds within 2 years. The 1965 figure excludes 12 million pounds which the Crop Reporting Board shows as produced but "not marketed and excluded in computing value." For 1966, the Crop Reporting Board shows a 2.4 percent decline in acreage below 1965 and a 0.4 percent increase in production to 342.0 million pounds, including production "not marketed."

Fresh asparagus imports, that is, Mexican exports to the United States, have remained insignificant. They were lower in 1965 and 1964 than in 1963 when they reached

TABLE 16.--Asparagus: U.S. production, imports, exports, and apparent consumption, 1956-66

Year	Production <sup>1</sup>	Imports <sup>2</sup>	Exports			Apparent consumption <sup>5</sup>
			Fresh <sup>4</sup>	Canned	Total	
Fiscal year:	----- Million pounds -----					
1966 .....	342,0	1,9	6,8	37,2	44,0	n.a.
1965 .....	328,5	n.a.	6,7	54,0	60,7	n.a.
Calendar year:						
1965 .....	328,5	<sup>3</sup> 1,5	6,8	46,4	53,2	276,8
1964 .....	355,6	1,6	6,0	61,7	67,8	289,4
1963 .....	375,5	2,4	4,9	62,2	67,1	310,7
1962 .....	372,5	1,7	4,6	64,1	68,7	305,5
1961 .....	368,6	1,2	5,7	44,4	50,1	319,7
1960 .....	374,9	---	4,9	51,2	56,0	318,9
1959 .....	361,1	---	4,9	30,2	35,1	326,0
1958 .....	353,5	---	4,2	48,2	52,4	301,1
1957 .....	362,3	---	6,6	38,0	44,6	317,7
1956 .....	349,5	n.a.	4,8	32,7	37,5	312,0

<sup>1</sup> In 1966, production reported as "not marketed" by the Crop Reporting Board, if any, is included; in 1965, 12,000,000 lb. of Early Spring California asparagus, which the Crop Reporting Board reports as produced but not marketed, are excluded here.

<sup>2</sup> Mexican exports of fresh asparagus to the United States. U.S. asparagus imports for consumption inspected by the Plant Quarantine Branch in million pounds by fiscal years were 0.7 in 1965, 1.3 in 1964, and 1.9 in 1963. Foreign Agricultural Trade of the United States, June 1966, May 1965, and Feb.-Mar. 1964. Thus, Mexican exports to the United States may include Mexican exports to Canada transshipped through the United States.

<sup>3</sup> Total Mexican exports minus Canadian imports from Mexico.

<sup>4</sup> Canadian imports of fresh asparagus from United States.

<sup>5</sup> Production plus imports minus exports.

Sources: Vegetables--Fresh Market; Agricultural Statistics 1965; Trade of Canada, Imports; Banco Nacional de Comercio Exterior, S.A., Comercio Exterior de Mexico 1964, Mexico, D.F., 1966; U.S. Bureau of the Census Reports FT 410 Annual, and, for fiscal years, Agriculture Specialist Reports.

<sup>22</sup> Vegetables--Fresh Market, Oct. 7, 1966, p. 4.

their highest level. Fresh asparagus exports, that is, Canadian imports from the United States, were at the highest level for the decade in calendar year 1965 and in fiscal year 1966. But the much more significant canned asparagus exports declined from a stable 3-year average (1962-64) slightly above 60 million pounds to 46 million pounds in calendar year 1965 and to 37 million pounds in fiscal year 1966. In value terms, the decline was from \$15.6 million in 1964 to \$12.5 million in the calendar year 1965 and to \$11.3 million in the fiscal year 1966.

Canned asparagus exports are preponderantly made up of white asparagus, and white asparagus is produced and processed only in California, mostly for export.<sup>23</sup> White asparagus production for canning, in California, declined to 30 million pounds in 1965 after it had averaged 67 million pounds from 1961 to 1964 with little annual variation and after a previous minimum production, during the decade, of 45 million pounds in 1957. White asparagus declined to 51.2 percent of the total canned asparagus pack in California during 1965, the lowest percentage in a decade.<sup>24</sup> White asparagus has to be cut under the ground. If the stems are cut too high, the quantity harvested suffers. If they are cut too low, the fibrous lower ends of the stem reduce the value of the crop. Thus, white asparagus cutting involves considerable skill and, at the same time, it is a back-breaking job. Because of these characteristics of the harvesting job, white asparagus production and exportation are being radically affected by the termination of the Bracero Program.

## Cucumbers

Fresh cucumber production, imports, exports,<sup>25</sup> and apparent consumption were all at 10-year high points in 1965 (table 17). U.S. cucumber production for the fresh market was 496 million pounds in 1965, 2 million pounds more than in 1964. This excludes quantities which the Crop Reporting Board designated as "not marketed and excluded in computing value." Planted acreage did not change, harvested acreage and percentage of planted acreage that was harvested were up slightly, but yield was down 4 percent. Imports rose by 24 million pounds and exports by 6 million pounds. Apparent consumption increased by 20 million pounds. Cucumber imports had dropped from 1963 to 1964. Thus, the rise in imports from 1964 to 1965 looks less impressive in the context of a time series.

U.S. cucumber production for pickling, imports of pickles or of cucumbers in brine, exports of pickles, and apparent consumption also increased from 1964 to 1965. The 1965 production data exclude 27.3 million pounds of Michigan cucumbers for pickles grown but not marketed.

As long as imports of cucumber pickles were separately reported by the Bureau of the Census, such imports from Mexico were nil or negligible. In August 1963 they were merged into a basket item, "other vegetables, packed in salt, in brine, or pickled." Imports from Mexico of the two formerly separate items and of the present basket item developed as shown in table 18.

In 1962, the last year of separate reporting, cucumber pickle imports were 1.4 million pounds. Imports of "other vegetables, packed in salt, in brine, or pickled" from

<sup>23</sup> William E. Martin, Alien Workers in United States Agriculture: Impacts on Production, Article No. 1163, Jour. Ser. Ariz. Agr. Exp. Sta. published in 1966 Proceedings Issue, Jour. Farm Econ.

<sup>24</sup> Canners League of California, Special Asparagus Bulletin, San Francisco, annual issues; and California Crop and Livestock Reporting Service, Asparagus for Processing, 1965 Season, mimeographed, as quoted in Leon Garoian, and A. N. Halter, Termination of the Bracero Program: An Analysis of Economic Impact on Major Labor Intensive Horticultural Crops, Calif., 1965, Prepared for the National Commission on Food Marketing, Jan. 1966, Processed.

<sup>25</sup> Actually, Canadian imports, since U.S. fresh cucumber exports are not separately reported,

TABLE 17.--Cucumbers: U.S. production, imports, exports, and apparent consumption, 1956-66

Year	Production <sup>1</sup>	Imports <sup>2</sup>	Exports <sup>3</sup>	Apparent consumption <sup>4</sup>
For fresh market				
Fiscal year:	----- Million pounds -----			
1966.....	---	71,1	33,0	---
1965.....	---	74,6	27,4	---
Calendar year:				
1965.....	496,2	75,8	33,2	538,8
1964.....	494,3	51,4	26,8	518,9
1963.....	477,2	61,2	27,6	510,8
1962.....	417,1	59,0	27,1	449,0
1961.....	463,8	44,3	29,7	478,4
1960.....	423,9	66,1	27,5	462,5
1959.....	389,2	35,1	19,5	404,8
1958.....	412,4	45,1	25,2	432,3
1957.....	447,8	42,0	26,1	463,7
1956.....	393,1	43,6	18,3	418,4
For processing or processed <sup>5</sup>				
Fiscal year:				
1966.....	---	(11,5)	11,1	---
1965.....	---	(4,9)	8,0	---
Calendar year:				
1965.....	862,5	(10,7)	9,3	863,9
1964.....	855,1	(4,3)	7,9	851,5
1963.....	940,3	(1,8)	9,4	932,7
1962.....	818,9	1,4	9,1	811,2
1961.....	853,3	1,0	8,7	845,6
1960.....	695,2	1,1	9,5	686,8
1959.....	678,4	1,2	11,5	668,1
1958.....	712,6	1,2	11,5	702,3
1957.....	739,8	1,1	17,0	723,9
1956.....	646,0	1,8	9,9	637,9
Total				
Fiscal year:				
1966.....	---	82,6	44,0	---
1965.....	---	79,5	35,4	---
Calendar year:				
1965.....	1,358,7	86,5	42,5	1,402,7
1964.....	1,349,4	55,7	34,7	1,370,4
1963.....	1,417,5	63,0	37,0	1,443,5
1962.....	1,236,0	60,4	36,2	1,260,2
1961.....	1,317,1	45,3	38,4	1,324,0
1960.....	1,119,1	67,2	37,0	1,149,3
1959.....	1,067,6	36,3	31,0	1,072,9
1958.....	1,125,0	46,3	36,7	1,134,6
1957.....	1,187,6	43,1	43,1	1,187,6
1956.....	1,039,1	45,4	28,2	1,056,3

<sup>1</sup> Production reported by the Crop Reporting Board as "not marketed" is excluded. Data from Vegetables--Fresh Market; Vegetables--Processing, Annual Summary 1965; and Agricultural Statistics, 1965.

<sup>2</sup> The separate reporting of imports of cucumber pickles was discontinued as of September 1963. To complete the table the parenthetical figures were inserted. These are imports from Mexico of "vegetables in brine, in salt or pickled, not specially provided for," believed to be nearly all cucumbers. Data from Bureau of the Census, Reports FT 110, FT 125, FT 246, and Agriculture Specialist Reports. <sup>3</sup> Exports for fresh market are Canadian imports from the U.S. of cucumbers for fresh consumption and for manufacturing from Trade of Canada, Imports. <sup>4</sup> Production plus imports minus exports. <sup>5</sup> Production for processing; imports and exports of pickles.

TABLE 18.--Other vegetables packed in salt, in brine, or pickled: U.S. imports for consumption from Mexico, 1960-66 <sup>1</sup>

Year	Value	Quantity	Unit value
	<u>1,000 dollars</u>	<u>1,000 pounds</u>	<u>Cents per pound</u>
Calendar year:			
1960-62 average .....	256	1,618	15.8
1963 .....	379	2,788	13.6
1964 .....	502	4,290	11.7
1965 .....	675	10,741	6.3
Fiscal year:			
1965 .....	531	4,891	10.9
1966 .....	794	11,515	6.9

<sup>1</sup> Through August 1963, figures shown are the sum of cucumber pickles and other vegetables pickled, or packed in salt or in brine. Effective September 1963 cucumber pickles were merged into the latter item.

Sources: U.S. Bureau of the Census, Reports FT 110, 125, 246, and Agriculture Specialist Reports.

Mexico were 1.7 million pounds. This item includes peppers and many minor vegetables. From 1964 to 1965, the merged imports from Mexico rose from 4.3 to 10.7 million pounds and their unit value dropped from 11.7 cents per pound to 6.3 cents. The lower unit value, as well as trade and attache reports, lead to the conclusion that cucumbers in brine--a semiprocessed product to be further processed into cucumber pickles--account for the recent increase in these imports and thus, for the larger portion of these imports, in 1965 and 1966.

Imports from Mexico of "other vegetables, packed in salt, in brine, or pickled" are used as an estimate of total U.S. imports of cucumber pickles in table 17 to offset the omission of any non-Mexican pickle imports.

Cucumbers in brine are dutiable at 12 percent ad valorem. This rate is considerably lower than the duty rates applying to most other products under discussion. In particular, with unit values of perhaps 6 cents per pound or less, the 12-percent ad valorem rate is less than the 1.5 to 3.0 cents per pound duty rates on fresh cucumbers which would range up to 45 percent on an ad valorem basis. Most fresh cucumbers--about 73 percent of total imports in fiscal years 1964 and 1965--are entered from December 1 through the end of February when the duty rate is intermediate (2.2 cents per pound). The lowest duty rate applies during July and August (1.5 cents per pound) but imports are nil or negligible. The highest duty rate (3.0 cents per pound) applies during the other 7 months of the year, March-June and September-November, when about 27 percent of total imports are entered. That duty rate was equal to 45 percent ad valorem for Mexican imports in 1964 and is, thus, the highest rate of all those shown in table 2.

Mexico's formerly minor share in U.S. fresh cucumber imports increased greatly in 1965. Mexican commercial cucumber acreage increased from 2,800 in 1963/64 to 3,800 in 1964/65, and to 6,400 in 1965/66. Production also increased, (Production had been lower from 1958 to 1963 than in 1956 and 1957.) (Table 19).

## Cantaloups

U.S. cantaloup production declined by 74.5 million pounds (5.9 percent) from 1964 to 1965 (table 20). One-third of the decline is accounted for by cantaloups grown but not marketed. Production was the lowest since 1957. A further decline in 1966 is indicated according to the Crop Reporting Board's October 7, 1966, report, Vegetables--Fresh Market.

TABLE 19.--Cucumbers: Production in Mexico, 1956-66<sup>1</sup>

Year	Metric tons	Million pounds
1966.....	28,100	61,9
1965.....	21,675	47,8
1964.....	12,642	27,9
1963.....	11,152	24,6
1962.....	7,649	16,9
1961.....	8,351	18,4
1960.....	4,587	10,1
1959.....	3,286	7,2
1958.....	1,678	3,7
1957.....	12,620	27,8
1956.....	14,479	31,9

<sup>1</sup> The principal Mexican production area lies in Sinaloa, on the west coast, about 145 to 270 miles from the U.S. border. The principal harvesting season is January through April.

Source: Banco Nacional de Comercio Exterior, S.A., Departamento de Estudios Economicos, Mexico; 1961-1965 data published in Comercio Exterior, May 1966, p. 358. Data for other years furnished by letter to the author.

TABLE 20.--Cantaloups: Production in Mexico and the United States, and U.S. imports, exports, and apparent consumption, 1956-66

Year	Mexican production		U.S. production	Imports	Exports <sup>1</sup>	Apparent consumption <sup>2</sup>
	1,000 m.t.	Million pounds	Million pounds	Million pounds	Million pounds	Million pounds
Fiscal year:						
1966.....	---	---	---	139,1	34,5	---
1965.....	---	---	---	148,2	27,8	---
Calendar year:						
1965.....	200	440,9	<sup>3</sup> 1,192,2	148,7	33,8	1,307,1
1964.....	196	432,1	1,266,7	131,7	25,4	1,373,0
1963.....	126	277,8	1,367,1	111,1	29,9	1,448,3
1962.....	117	257,9	<sup>3</sup> 1,336,1	98,0	30,2	1,403,9
1961.....	73	160,9	1,289,2	79,6	29,3	1,339,5
1960.....	81	178,6	1,263,2	79,4	28,2	1,314,4
1959.....	66	145,5	1,287,0	56,5	29,0	1,314,5
1958.....	67	147,7	1,242,4	44,0	27,6	1,258,8
1957.....	67	147,7	1,111,0	50,2	23,7	1,137,5
1956.....	67	147,7	1,233,3	51,9	25,7	1,259,5

<sup>1</sup> Exports of melons other than watermelons; this includes small amounts of honeydew melons.

<sup>2</sup> Apparent consumption is production plus imports minus exports.

<sup>3</sup> Quantities which the Crop Reporting Board shows as "not marketed" are excluded.

Sources: Indices of Agricultural Production, op. cit.; Vegetables--Fresh Market, 1965, Annual Summary, Agricultural Statistics 1965; U.S. Bureau of the Census, Reports FT 110, FT 125, and FT 410, and for fiscal years, Agriculture Specialist Reports.



Imports and exports were both at record levels in 1965; but imports were almost three times as much as in 1956-59 while exports were up only about 28 percent. Imports in fiscal year 1966 were 6.1 percent below a year earlier but well above 1964. The proportion of imports relative to apparent consumption increased to 11.4 percent in 1965 from 9.6 percent in 1964. Apparent consumption was the lowest since 1958.

Mexican cantaloup production showed a small increase from 1964 to 1965 following a very large increase from 1963 to 1964. Like U.S. imports, Mexican production has tripled since the late fifties.

No cantaloups were imported in 1964 and 1965 during the low-duty period (20 percent ad valorem) from August 1 through September 15; thus, all imports were subjected to the 35 percent ad valorem duty.

## Watermelons

U.S. production, imports, exports, and apparent consumption of watermelons, all increased substantially from 1964 to 1965. Mexican production increased more moderately from 1964 to 1965, after a 68-percent increase from 1963 to 1964. U.S. production and apparent consumption both increased 9 percent; imports increased 24 percent, and exports 23 percent. Exports showed a substantial further increase from fiscal year 1965 to fiscal year 1966, while imports declined significantly. A decline in production in 1966 is indicated in the Crop Reporting Board's October 7, 1966 report, Vegetables--Fresh Market. Exports exceeded imports during each of the past 10 years. Exports have tended to be between 2 and 3 percent of U.S. production. Since 1961, U.S. production and exports have moved in biennial cycles with exports amounting to about 83 million pounds in odd-numbered years and to about 66 million pounds in 1962 and again in 1964, but prospectively to much more in 1966. Imports in 1965 were about twice as much as they averaged in 1956-58 and almost the same as in 1960, the high mark for the decade (table 21). Since 1959, they have amounted to about 2 percent of U.S. production.

The value of watermelon imports in 1965 was the same as in 1964 and considerably below 1960 (table 3). The watermelon duty is not seasonally differentiated.

Mexican watermelon production moved in line with Mexican cantaloup production showing a small increase from 1964 to 1965 following a phenomenal increase from 1963 to 1964. Since 1956 it has almost quadrupled.

## Lettuce

More foreign seasonal hired labor in proportion to total seasonal hired labor (55.3 percent) was used for lettuce production than for any other crop (table 1). Moreover, 10.7 percent of all foreign seasonal hired labor was used in lettuce production. Yet, since 1963 the volume of lettuce imports has remained extremely small amounting to only about one-hundredth of one percent of U.S. production. In 1965 as well as in 1964, the bulk of this small volume of imports was entered from Canada during the lower-duty season, June through October, when less than half the domestic crops is produced. Exports jumped to 222 million pounds during fiscal year 1966, up 30 percent from a year earlier.

In 1965 production reached the highest level of the time series shown in table 22, and 1966 production is indicated as about 1 percent higher. From 1964 to 1965 there were increases in acreage harvested, yield per acre, and percentage of planted acreage which was harvested, in California as well as in the entire United States. In California, however, acreage planted declined, whereas in the United States, as a whole, acreage planted increased. Acreage abandonment in California was so small in 1965 that more acres

TABLE 21.--Watermelons: Production in Mexico and the United States, and U.S. imports, exports, and apparent consumption, 1956-66

Year	Mexican production		U.S. production <sup>1</sup>	Imports	Exports	Apparent consumption <sup>2</sup>
	1,000 metric tons	Million pounds	Million pounds	Million pounds	Million pounds	Million pounds
Fiscal year:						
1966 .....	---	---	---	61.9	91.7	---
1965 .....	---	---	---	72.3	81.7	---
Calendar year:						
1965 .....	380	837.7	3,015.3	71.5	83.5	3,003.3
1964 .....	358	789.2	2,766.6	57.5	67.7	2,756.4
1963 .....	213	469.6	2,933.7	63.0	84.2	2,912.5
1962 .....	204	449.7	2,619.8	49.6	64.3	2,605.1
1961 .....	136	299.8	2,898.3	45.1	82.7	2,860.7
1960 .....	134	295.4	2,961.9	72.0	83.6	2,950.3
1959 .....	127	280.0	2,689.4	58.0	64.7	2,682.7
1958 .....	124	273.4	3,019.9	43.5	64.1	2,999.3
1957 .....	123	271.2	2,748.7	24.5	62.4	2,710.8
1956 .....	102	224.9	2,954.1	37.7	61.2	2,930.6

<sup>1</sup> Quantities which the Crop Reporting Board shows as "not marketed" are excluded.

<sup>2</sup> Apparent consumption is production plus imports minus exports.

Sources: Indices of Agricultural Production, op. cit.; Vegetables--Fresh Market 1965 Annual Summary; Agricultural Statistics 1965; U.S. Bureau of the Census, Reports FT 110, FT 125, FT 410 and, for fiscal years, Agriculture Specialist Reports.

TABLE 22.--Lettuce: U.S. production, imports, exports, and apparent consumption, 1956-66

Year	Production <sup>1</sup>	Imports	Exports	Apparent consumption <sup>2</sup>
	----- Million pounds -----			
Fiscal year:				
1966 .....	---	0.6	221.5	---
1965 .....	---	0.3	170.1	---
Calendar year:				
1965 .....	4,103.6	0.4	180.8	3,923.2
1964 .....	3,903.7	0.5	175.9	3,728.3
1963 .....	3,907.3	0.5	164.4	3,743.4
1962 .....	3,712.4	1.3	163.4	3,550.3
1961 .....	3,624.6	3.3	159.2	3,468.7
1960 .....	3,495.4	3.6	145.9	3,353.1
1959 .....	3,412.6	3.2	152.6	3,263.2
1958 .....	3,395.2	2.3	144.7	3,252.8
1957 .....	3,437.6	2.5	140.3	3,299.8
1956 .....	3,529.5	3.9	128.3	3,405.1

<sup>1</sup> Quantities which the Crop Reporting Board shows as "not marketed" are excluded.

<sup>2</sup> Production plus imports minus exports.

Sources: Vegetables--Fresh Market, Annual Summaries, 1964 and 1965; Agricultural Statistics, 1965; Foreign Agricultural Trade of the United States; U.S. Bureau of the Census, Reports FT 110, FT 246, FT 410, and for fiscal years, Agriculture Specialist Reports.



were harvested there in 1965 than in 1964 (table 23). Circumstances were so favorable that the termination of the bracero program caused no statistically noticeable injurious effects.

TABLE 23.--Lettuce: Production data: 1964-65 changes, United States and California

	United States		California	
	1965	1964	1965	1964
Production, million lb. ....	4,104.7	3,904.4	2,385.1	2,300.5
Percent of 1964. ....	105.1		103.7	
Acreage harvested, 1,000 acres ....	216.2	212.7	115.6	115.1
Percent of 1964. ....	101.6		100.4	
Yield per acre, 1,000 lb. ....	19.0	18.4	20.6	20.0
Percent of 1964. ....	103.3		103.0	
Acreage planted, 1,000 acres ....	221.7	219.0	116.7	119.4
Percent of 1964. ....	101.2		97.7	
Planted acreage harvested (percent) ....	97.5	97.1	99.1	96.4
Percent of 1964. ....	100.4		102.8	

Source: Vegetables--Fresh Market, Annual Summary. 1965.

## Celery

The percentage of foreign seasonal hired labor used on celery was about one-third of total seasonal hired labor. Thus, celery ranked third after lettuce and sugarcane. Production declined 9 percent from 1956, the highest level shown in table 24, to 1964 when the lowest level was attained; it increased by 1.6 percent in 1965; a similar increase is indicated for 1966. Exports jumped to 126 million pounds in fiscal year 1966, up 30 percent from a year earlier, the same rate of increase as that observed in lettuce exports. Imports tripled but remained an insignificant 0.03 percent of domestic production. Apparent consumption has been stable, but has declined on a per capita basis in recent years.

TABLE 24.--Celery: U.S. production, imports, exports, and apparent consumption, 1956-66

Year	Production <sup>1</sup>	Imports	Exports	Apparent consumption <sup>2</sup>
----- Million pounds -----				
Fiscal year:				
1966 .....	---	0,4	125,8	---
1965 .....	---	0,1	97,0	---
Calendar year:				
1965 .....	1,415,9	0,1	102,9	1,313,1
1964 .....	1,393,0	0,1	86,9	1,306,2
1963 .....	1,415,0	---	100,2	1,314,8
1962 .....	1,412,9	---	82,2	1,330,7
1961 .....	1,483,7	0,1	92,0	1,391,8
1960 .....	1,516,7	---	92,3	1,424,4
1959 .....	1,478,8	---	92,9	1,385,9
1958 .....	1,426,0	0,1	88,3	1,337,8
1957 .....	1,513,7	0,2	89,0	1,424,9
1956 .....	1,537,3	0,1	88,1	1,449,3

<sup>1</sup> Quantities which the Crop Reporting Board shows as "not marketed" are excluded.

<sup>2</sup> Production plus imports minus exports.

Sources: Vegetables--Fresh Market, 1965; Agricultural Statistics, 1965; U.S. Bureau of the Census, Reports FT 110, FT 125, FT 410, and for fiscal years, Agriculture Specialist Reports.

## Part II. Overall Trade and Balance-of-Payment Considerations

Having discussed foreign trade developments in the individual former bracero crops and in aggregates of these crops, we now turn to an examination of the overall trade and monetary setting that prevailed immediately before and after the termination of the bracero program.

### BRACERO SAVINGS IN THE CONTEXT OF U.S. INTERNATIONAL PAYMENTS POSITION

The California Farm Labor Panel reported the following bracero earnings in California:<sup>26</sup>

	<u>Million dollars</u>
Annual average 1959-63	81
1964	78
1965	12

The Panel assumed that approximately 75 percent of these earnings or about \$60 million a year were taken to Mexico during 1959-64. Braceros elsewhere may have earned an additional \$20 to \$30 million a year through 1964. A dollar outflow of up to \$60 million a year with total bracero earnings of \$100 to \$110 million appears possible, whereas the assumption of a dollar outflow of 75 percent of bracero earnings seems excessive. Thus, from 1964 to 1965 the outflow of money from this country would have been reduced by about \$50 million. The Bank of Mexico more conservatively estimated the contribution of braceros to the Mexican balance of payments at \$31 million in 1963 and \$29 million in 1964.<sup>27</sup> The discrepancy between the two estimates may partially be explained by the fact that braceros took some U.S. goods, rather than money only, with them when they returned home.<sup>28</sup> This observation is of some consequence, since the California Farm Labor Panel notes in its report "that earnings of domestic workers have been augmented by tens of millions of dollars. The multiplier effect of the spending of these wages in the community makes the economic impact of keeping these wages at home even more important, and should particularly be borne in mind in appraising export losses suffered by growers through inability to harvest all of their crops."<sup>29</sup>

The juxtaposition or equation of crop losses (through inability to harvest) and export losses is unrealistic. One type of loss has no direct relationship with the other type of

<sup>26</sup> Final Report of the California Farm Labor Panel (in Year of Transition, op. cit., p. I (Eye) - 14), Data supplied to the Panel by the State of California, Department of Employment, Research and Statistics Section.

<sup>27</sup> Banco Nacional de Comercio Exterior, S. A., Comercio Exterior, Mexico, May 1965, p. 395.

<sup>28</sup> A USDA official engaged in the administration of the Sugar Act told the writer that, according to a reliable source, braceros returning home took as many U.S. sewing machines with them as available space on the buses permitted. Another such official reported that he had seen a bracero-purchased American automobile while traveling in rural Mexico.

<sup>29</sup> Final Report of the California Farm Labor Panel, op. cit., p. I (Eye) - 14.

loss. Economic situations may exist under which the exportation of goods may be interpreted as a marginal sale or as a surplus removal operation, but this hardly applies to the exportation of perishable, fresh fruits and vegetables from the United States to Canada, our most important customer for such products. At any one time during the shipping season and for any one shipper, a Canadian market outlet would tend to rank equal with and not inferior to, a domestic outlet. Furthermore, reasoning which would consider a multiplier effect on the domestic economy as sort of an offset for export market losses is one-sided, because it ignores the multiplier effect of earnings from exports.

More crucial in the context of the multiplier effect are the U.S.-Mexican trade balance and the U.S. and Mexican balance-of-payments positions. If the multiplier effect is considered for wage payments to domestic laborers, it should also be considered for wage payments to braceros. Not only did braceros' expenditures for goods consumed while in the United States and for goods to be taken to Mexico have a multiplier effect, but even funds which the braceros took to Mexico benefited the U.S. economy indirectly by their effect on Mexican economic development and, more directly, by creating Mexican demand for U.S. goods and for Mexican travel to the United States, particularly border visits. That is not to say that the program should be reinstituted, but no unrealistic claims should be made in connection with its termination.

Whatever the exact amount of bracero earnings taken to Mexico, the termination of a program under which from \$30 to \$60 million a year flowed from the United States to Mexico is of some consequence in the context of U.S.-Mexican trading, tourism, and capital flows.

### U.S.-MEXICAN TRADE BALANCE HIGHLY FAVORABLE TO UNITED STATES

The bracero program was terminated at the end of a year during which U.S. exports to Mexico and the U.S. trade balance with Mexico had increased significantly (table 25). Exports increased from an annual average in 1961-63 of \$827 million (with little annual variation) to almost \$1.1 billion in 1964 and to above \$1.1 billion in 1965 and in the fiscal years 1965 and 1966. Imports averaged \$570 million annually, during 1961-63, also with little annual fluctuation. They rose to \$643 million in 1964, dropped somewhat below that level in 1965 and in fiscal year 1965, but rose to almost \$700 million in fiscal year 1966. Thus, the United States had a positive trade balance with Mexico at an annual average of \$257 million during 1961-63 and of around \$450 million since then, except for a temporary rise to about \$500 million in the fiscal year 1965.<sup>30</sup>

Mexico's foreign trade balance in 1964 was negative in the amount of \$471 million and in 1965, it was negative in the amount of \$446 million.<sup>31</sup> Even if the production of gold and silver (exclusive of that for domestic industrial use) is added to merchandise exports, Mexico's trade deficit remains at \$425 million in 1964 and at \$405 million in 1965.<sup>32</sup>

<sup>30</sup> It would be reassuring, if these American trade balance data could be corroborated with similar Mexican figures. Mexican data show the flow of merchandise from the United States to Mexico smaller and that from Mexico to the United States larger than U.S. statistics in each of the years 1963-65. According to Mexican data, the Mexican balance of trade deficit with the United States, in million dollars, was as follows (U.S. data from table 25 in parentheses): 1963, 187 (267); 1964, 335 (449); and 1965, 370 (467). What the U.S. and Mexican statistics show in common is a large increase from 1963 to 1964 and a modest increase from 1964 to 1965. Mexican data from Banco Nacional de Comercio Exterior, S. A., Comercio Exterior de Mexico, 1964, p. 254 and Banco Nacional de Comercio Exterior, S. A., Comercio Exterior, May 1966, p. 368.

<sup>31</sup> Banco de Mexico, S. A., Informe Anual 1965, Mexico, D. F., 1966, p. 99.

<sup>32</sup> Banco Nacional de Comercio Exterior, S. A., presents balance of payments data in this manner; see Comercio Exterior, May 1966, p. 367.

TABLE 25.--U.S. trade balance with Mexico, 1960-66

Year	U.S. exports <sup>1</sup>	U.S. imports <sup>2</sup>	Balance <sup>3</sup>
	-----Million dollars-----		
1960.....	820	443	377
1961.....	815	538	277
1962.....	805	578	227
1963.....	861	594	267
1961-63 average.....	827	570	257
1964.....	1,092	643	449
1965.....	1,105	638	467
Fiscal year 1965.....	1,122	616	506
Fiscal year 1966.....	1,143	692	451

<sup>1</sup> U.S. exports of domestic and foreign merchandise.

<sup>2</sup> U.S. general imports (valued at the Mexican export level).

<sup>3</sup> First column minus second column.

Sources: U.S. Bureau of the Census, Foreign Commerce and Navigation of the United States, 1946-1963; Reports FT 950-E; and Reports FT 950-I.

## MEXICANS PAY FOR EXCESS IMPORTS WITH TOURIST SERVICES

Mexico tends to pay for the excess of U.S. exports to Mexico over U.S. imports from Mexico by entertaining tourists from the United States. (table 26) In fact, U.S. residents' travel expenditures in Mexico, as estimated by the U.S. Department of Commerce, since 1961 have exceeded the trade balance as may be seen by comparing column (1) with column (4) of table 26. These expenditures grew at an increasing rate from 1960 to 1963, but the increase slowed from 13 percent (1962 to 1963), to 7 percent (1963 to 1964) and to 5 percent (1964 to 1965).

## MEXICAN TRAVELERS SPENT QUARTER BILLION DOLLARS IN UNITED STATES IN 1964

This U.S. payment liability was partially offset by the expenditures of Mexican tourists in the United States. U.S. receipts from Mexican visitors for travel in the United States reached \$200 million in 1961 and increased quite steadily by an annual average of \$17 million from 1960 through 1965, reaching \$265 million in 1965. The average annual rate of increase during that period was 7.8 percent. Most of the \$250 million which Mexican visitors to the United States spent on travel in 1964 was spent in the border area; only 28 percent of the total (\$70 million) was spent on travel beyond the border area. But in 1965, receipts from travel beyond the border area increased to 32 percent of the total (\$85 million), while border area receipts increased only insignificantly.

Similarly, U.S. residents visiting only the Mexican border spent most of the funds spent by U.S. travelers in Mexico, while only 29 percent of the total was spent on more

<sup>33</sup> See appendix for a comparison between U.S. and Mexican statistics on travel expenditures.

TABLE 26.--U.S. trade and travel balance with Mexico, 1960-65

Year	U.S. residents' expenditures in Mexico	U.S. receipts from Mexican visitors, for travel in the United States	Travel balance	Trade balance	Trade and travel balance combined (3) + (4)
	(1)	(2)	(3)	(4)	(5)
	----- Million dollars -----				
1960.....	365	182	-183	377	194
1961.....	370	200	-170	277	107
1962.....	395	217	-178	227	49
1963.....	448	232	-216	267	51
1964.....	480	250	-230	449	219
1965.....	502	265	-237	467	230

Sources: Trade balance data from table 25. Other data from Etienne H. Miller, *Foreign Travel Payments Hit New High in 1964*, Survey of Current Business 45 (6): 25, 26, 28, June 1965; and same author, *Travel Payments Continue to Rise in 1965*, Survey of Current Business 46 (6): 15-17, June 1966.

distant travel in 1964. During 1960-63, border area expenditures similarly had averaged about 70 percent of total expenditures. In 1965, however, travelers into the interior of Mexico spent 32 percent of the total (\$160 million) while border visitors spent \$342 million compared with \$340 million in 1964.

### THE U.S. "TRAVEL BALANCE" WITH MEXICO

U.S. travel expenditures in Mexico were about twice as much as similar Mexican expenditures in the United States in 1960; but they have been less than twice as much since then. The negative U.S. "travel balance" with Mexico was stable around \$177 million from 1960 to 1962 but increased thereafter, amounting to \$237 million in 1965.

### COMBINED "TRADE AND TRAVEL BALANCE" WITH MEXICO POSITIVE

From 1960 to 1962 and 1963, the combined "trade and travel" balance of the United States with Mexico declined from \$194 million to about \$50 million, but jumped to \$219 million in 1964 and to \$230 million in 1965.<sup>34</sup>

We conclude that a trade balance recently widening in favor of the United States has only partially been offset by a travel balance which has recently widened in favor of Mexico. If money taken to Mexico by braceros is estimated at between \$30 million and \$60 million a year and corresponding amounts are deducted from the combined trade and travel balance (last column of table 26), the result is approximately zero for 1962 and again for 1963 (\$49 million or \$51 million minus from \$30 million to \$60 million ranges from -\$11 million to +\$21 million or very roughly, equals about zero). By contrast, for 1964, the "trade, travel, and bracero balance, combined" was at least \$159 million (\$219 million minus \$60 million) in favor of the United States, and for 1965, with braceros'

<sup>34</sup> See appendix for a comparison between U.S. and Mexican statistics on travel expenditures.



"take-home earnings" not more than \$9 million, this balance was at least \$221 million in favor of the United States. Or, the other way around, the "trade, travel, and bracero balance combined" was unfavorable to Mexico, at least by the amounts indicated. Under these circumstances, Mexico, with a loss in dollar earnings because of the termination of the bracero program must export more goods or services, import less, or make appropriate financial adjustments to offset the loss. These financial adjustments could be borrowing from abroad, receiving investment (equity) capital from abroad, increasing the production of gold or silver for monetary reserves, or dipping into reserves. The latter two types of adjustment are of limited scope; the important types are borrowing and receiving investment capital from abroad.

Because of the preponderance of the United States among Mexico's trading and investment partners, it would be unrealistic to expect that these adjustments might be made primarily with third countries. Indeed, considering the very favorable trade balance of the United States with Mexico and its favorable overall goods and services balance (which is principally made up of the trade, travel, and bracero balance combined) with Mexico, the termination of the bracero program has the primary effect of further unbalancing the U.S.-Mexican account for goods and services. The nature of the possible offsetting adjustments and the preponderant role of the United States in Mexican international economic relations lead to the conclusion that the termination of the bracero program cannot be assumed to have resulted in any lasting, fundamental, or substantial benefit to the United States balance-of-payments position.

The increase in U.S. fruit and vegetable imports from Mexico since the end of 1964 would appear to offset Mexico's loss of bracero earnings. However, the total trade balance with Mexico during fiscal year 1966 was about the same as during calendar year 1964 (table 25).

We now turn to capital movements between the two countries.

## CAPITAL MOVEMENTS AND BALANCES

In addition to goods and services, changes in U.S. liabilities to Mexico and in U.S. claims on Mexico determine the payment balance of the two countries.

These liabilities and claims are reported as short-term and long-term, and by banking and nonbanking institutions. The liabilities and claims reported by banks are much more important than those reported by nonbanking institutions.

From 1963 to 1964, the net short-term liability to Mexico (liabilities minus claims) reported by banks in the United States declined from \$204 million to \$91 million, and in 1965 it declined further to \$29 million (table 27). In both years, this decline was at least in part the result of increases in U.S. claims on Mexico. This indicates increased American short-term lending in Mexico.

The interpretation of changes in U.S. claims on and liabilities to Mexico is complicated by the fact that U.S. banks, in performing banking services for Mexico, not only tend to lend to and invest in Mexico, but also act as depositories. Lending and investing tend to result in U.S. claims on Mexico. Acting as a depository means receiving and holding funds for safe-keeping. Thus, the performance of banking services may generate U.S. liabilities to Mexico.

The performance of banking services may also affect the marked seasonality in short-term liabilities and claims reported by U.S. banks (table 28). While the claims of U.S. banks on Mexico varied from a low of \$644 million in December 1964 to a high of \$732 million in May 1966, their liabilities to Mexico tended to be high from December through March and low from June through November ranging from \$743 million in March



TABLE 27.--Liabilities to Mexico and claims on Mexico reported by banks in the United States, short-term and long-term, end of the year, 1963-65

Year	Liabilities to Mexico	Claims on Mexico	Balance
----- Million dollars -----			
Short-term			
1963 .....	669	465	-204
1964 .....	735	<sup>1</sup> 644	<sup>1</sup> -91
1965 .....	703	<sup>1</sup> 674	<sup>1</sup> -29
Long-term			
1963 .....	11	322	311
1964 .....	26	<sup>2</sup> 512	486
1965 .....	32	477	445
Total			
1963 .....	680	787	107
1964 .....	761	1,156	395
1965 .....	735	1,151	416

<sup>1</sup> Includes \$14 million (1964) and \$5 million (1965) of claims not previously reported.

<sup>2</sup> Includes \$59 million of claims not previously reported.

Sources: Federal Reserve Bulletin, Mar. 1966, pp. 431, 433, Treasury Bulletin, Feb. 1964, p. 104, Feb. 1965, p. 104; Feb. 1966, p. 108; Mar. 1966, pp. 89-91; and May 1966, pp. 94-96.

1965 to \$598 million in June 1966. The balance of liabilities and claims ranged even more widely, from a net liability of \$91 million in December 1964 to a net claim of \$124 million in June 1966. The magnitude of these swings dwarfs the loss of braceros' receipts to the Mexican economy.

Changes in long-term claims on and liabilities to Mexico reported by banks in the United States amounted to a substantial increase in net claims (claims minus liabilities), from \$311 million in 1963 to \$486 million in 1964; but during 1965, net long-term claims declined to \$445 million, a somewhat surprising change in direction and the opposite of what would be expected.

When short-term and long-term liabilities and claims are added (a practice subject to criticism because of their heterogeneity), there is a slight increase in U.S. net claims on Mexico (claims minus liabilities) from 1964 to 1965; by contrast, from 1963 to 1964 the increase in U.S. net claims was very large.

Liabilities and claims reported by nonbanking concerns declined insignificantly from 1964 to 1965 (table 29). As in the case of the liabilities and claims reported by banks, changes during 1964 were of a larger magnitude than changes shown for 1965.

According to the U.S. Treasury Department, there were no U.S. net monetary gold transactions with Mexico in 1964 and 1965.<sup>35</sup> Mexico's gold reserves and short-term dollar holdings, as reported by banks in the United States, amounted to \$863 million at the end of 1965, down \$41 million (5 percent) from a year earlier, but up \$55 million (7 percent) from the end of 1963.<sup>36</sup>

<sup>35</sup> Treasury Bulletin, Mar. 1966, pp. 82 f.

<sup>36</sup> Ibid.

TABLE 28.--Month-to-month variations in short-term liabilities to Mexico and claims on Mexico reported by banks in the United States, December 1964-June 1966

End of month	Liabilities to Mexico	Claims on Mexico	Balance
----- Million dollars -----			
1964			
December .....	735	644	-91
1965			
January .....	699	659	-40
February .....	710	686	-24
March .....	743	685	-58
April .....	700	684	-16
May .....	726	691	-35
June .....	687	693	6
July .....	623	671	48
August .....	622	672	50
September .....	642	677	25
October .....	611	655	44
November .....	644	665	21
December .....	703	<sup>1</sup> 669	-34
1966			
January .....	728	662	-62
February .....	742	686	-56
March .....	740	718	-22
April .....	727	713	-14
May .....	717	732	15
June .....	598	722	124

<sup>1</sup> \$674 million with inclusion of claims reported for the first time.

Source: Federal Reserve Bulletin, Mar. 1966, pp. 431, 433; Aug. 1966, p. 1257.

TABLE 29.--Liabilities to Mexico and claims on Mexico reported by nonbanking concerns in the United States, end of 1963, 1964, and 1965

Year	Liabilities to Mexico	Claims on Mexico	Balance
----- Million dollars -----			
Short-term			
1963 .....	8	60	52
1964 .....	7	76	69
1965 .....	5	78	73
Long-term			
1963 .....	(1)	69	69
1964 .....	(1)	73	73
1965 .....	(1)	69	69
Total			
1963 .....	8	129	121
1964 .....	7	149	142
1965 .....	5	147	142

<sup>1</sup> Less than 0.5.

Source: Federal Reserve Bulletin, Mar. 1966, p. 438; Treasury Bulletin, Feb. 1966, pp. 107f., Mar. 1966, pp. 102-106, and May 1966, pp. 109.

## U.S. FIRMS INCREASE PLANT AND EQUIPMENT EXPENDITURES IN MEXICO

U.S. firms and their affiliates reported rising plant and equipment expenditures in Mexico financed in the form of a capital outflow from the United States for direct investment (table 30). Pizer and Cutler, the researchers on whose study we rely, observe that in 1964 "there was a notable rise in capital flows to Mexico, especially for manufacturing."<sup>37</sup> Here again, as previously observed with respect to the claims on Mexico reported by banks and by nonbanking concerns, expenditures increased substantially from 1963 to 1964, viz. by \$51 million; the 1964 to 1965 change was smaller, amounting to \$28 million. The doubling in projected 1966 expenditures from \$82 million at the time of the first projection to \$161 million at the time of the third projection is noteworthy. Unfortunately, these data do not yield specific information on U.S. investment in the Mexican fruit and vegetable industry. There is some indication that such investment has increased during the last few years, but no quantification of this has been possible nor any differentiation between the year 1965 and the immediately preceding years.<sup>38</sup>

According to a special study of the investigations staff of the Committee on Appropriations of the House of Representatives initiated in July 1965, three of the major U.S. fruit and vegetable processors invested at least \$1 million each in Mexican processing plants during the past few years.<sup>39</sup>

TABLE 30.--Plant and equipment expenditures of U.S. direct investments in all  
Mexican industries, 1963-67

	Expenditures
	<u>Million dollars</u>
1963. ....	75
1964. ....	126
1965. ....	154
1966:	
First projection .....	82
Second projection .....	147
Third projection .....	161
1967:	
First projection .....	135

Sources: S. Pizer and F. Cutler, Foreign Investment, 1964-65; Survey of Current Business, 45 (9): 27, 30, Sept. 1965; Revised Projections of Foreign Plant and Equipment Expenditures by Affiliates of U.S. Firms, Survey of Current Business 46 (3): 8, Mar. 1966; and Foreign Investments, 1965-66; Survey of Current Business 46 (9): 32, Sept. 1966.

<sup>37</sup> S. Pizer, and F. Cutler, Foreign Investment, 1964-65, Survey of Current Business 45 (9): 27, Sept. 1965.

<sup>38</sup> Braceros, Mexico, and Foreign Trade, Farm Labor Developments, July 1966, pp. 19, 21. U.S. Dept. Labor, Bur. Employment Security.

<sup>39</sup> House of Representatives, Committee on Appropriations, Hearings before a Subcommittee on Department of Agriculture Appropriations for 1967, Part 3, pp. 655, 680, Eighty-Ninth Cong., 2d Sess., 1966.

To judge the effect of the termination of the bracero program, we should not only have actual investment data but also information on motivation. This is impossible to obtain for several reasons. Not only may investors be unwilling to reveal their motivation, but they may not be entirely clear themselves about what motivates them. In this connection it is interesting to observe that reports from Mexico make little reference to the termination of the bracero program, whereas Americans interested in investment in fruit or vegetable production in Europe have alluded to the bracero program even though the integration of the Common Market appears to be more crucial to their decision-making than any development in the Western Hemisphere.

## U.S. AND WORLD BANK LEND \$45 MILLION FOR MEXICAN AGRICULTURAL DEVELOPMENT IN 1965

Perhaps of special significance to United States-Mexican financial relations following the termination of the bracero program was the approval in June 1965 by the Agency for International Development of a Government of Mexico request for a \$20 million loan to the Agricultural Guarantee Fund (Fondo de Garantía y Fomento para la Agricultura, Ganadería y Avicultura) of the Bank of Mexico for rediscounting agricultural loans. A similar \$20 million loan had been made in 1962; but by mid-1965 these earlier funds had been fully committed.<sup>40</sup>

In September 1965, the International Bank for Reconstruction and Development granted a \$25 million loan for the benefit of Mexican agriculture also to be administered by "Fondo."<sup>41</sup>

## MEXICAN BALANCE OF PAYMENTS SHOWS DECLINING CURRENT ACCOUNT DEFICIT IN 1965

Finally we present the Mexican balance of payments (table 31). This account tells the story of the impact of the termination of the bracero program on the economy of Mexico most succinctly. A rather regular income flow of about \$30 million per year suddenly declined to \$12 million in 1965, as shown in table 31, or to even less.<sup>42</sup> Radical as this decline was for those who felt it, in the context of balance-of-payments accounts, it is submerged in the stream of an expanding economy. In spite of the virtual loss of the bracero account, Mexico's overall account of "exports of goods and services" increased by \$150 million in 1965. Moreover, the negative balance of goods and services declined by almost \$50 million. That negative balance still compares unfavorably with the years 1961-63. Receipts of long-term credits declined by one-half from 1964 to 1965 and were slightly below the stable 1961-63 average of \$376 million.

<sup>40</sup> McGehee H. Spears, *Trip Report*, April 13-30, 1966, Econ. Res. Serv., U.S. Dept. Agr., mimeographed.

<sup>41</sup> Ibid. and IBRD Press Release No. 65/45, Internatl. Bank for Reconstr. and Devlpmt., Sept. 17, 1965.

<sup>42</sup> Actually, the estimate of \$12 million is too high to be consistent with the estimates for the earlier years. The California Farm Labor Panel reported annual bracero earnings of about \$80 million through 1964 and \$12 million in 1965. It assumed that 75 percent of these earnings were taken to Mexico; the Bank of Mexico assumed that before 1965 about half as much was received in Mexico as a monetary credit, apparently allowing for merchandise imports by braceros. Thus braceros' "take home pay" in the international monetary sense may have been between \$4.5 million and \$9 million in 1965. Moreover, if 508,100 man-months of employment of Mexicans in 1964 resulted in the receipt of \$29 million in the Mexican balance-of-payment accounts, 26,500 man-months of such employment in 1965 could not have yielded \$12 million. (The data on man-months are from *Farm Labor Developments*, op. cit., Mar. 1966, p. 9.)

TABLE 31.--Balance of payments, Mexico, 1961-65

Item		1961	1962	1963	1964	1965
		----- Million dollars -----				
I.	Exports of goods and services .....	1,605	1,779	1,685	1,811	1,961
	Exports of merchandise and production of gold and silver <sup>1</sup> .....	844	946	987	1,068	1,155
	Tourism .....	(715)	(789)	211	241	278
	Border transactions .....			446	463	505
	Braceros .....			31	29	12
	Other revenue items .....	11	9	10	10	12
II.	Imports of goods and services .....	1,526	1,568	1,710	1,986	2,089
	Imports of goods .....	1,139	1,143	1,240	1,493	1,560
	Tourism .....	(320)	(341)	81	97	115
	Border transactions .....			265	277	294
	Other expenditure items .....			124	120	120
III.	Balance of goods and services (I-II) .....	78	211	-25	-175	-128
IV.	Net movement of long-term capital .....	166	136	184	352	-20
	Receipt of long-term credits .....	357	386	386	695	344
	Amortization of long-term credits <sup>2</sup> .....	-172	-237	-231	-311	-399
	Net government debt .....	-12	-15	35	<sup>3</sup> -24	22
	Net transactions of securities .....	-7	1	-6	-8	12
V.	Net movement of revenue and expenditures estimated each quarter (sum of III and IV) .....	244	346	158	177	-148
VI.	Net movement of revenue and expenditures not estimated each quarter (interest and dividends on direct foreign investments, new investments, etc.) and net errors and omissions .....	-267	-254	9	-208	157
VII.	Balance (net change in short-term, international assets of private persons, enterprises, private banks, national banks, and the Bank of Mexico) (sum of V and VI) .....	-22	92	167	-31	9

<sup>1</sup>Excludes gold and silver used for industrial purposes in the country. <sup>2</sup>In 1964 and 1965, the item includes foreign credits granted for the development of Mexican exports. <sup>3</sup>Includes an anticipated payment to the Export-Import Bank for a stabilization credit obtained in earlier years.

Sources: Banco de Mexico, S.A., Departamento de Estudios Economicos, 1961 and 1962 data as shown in Overseas Business Reports, OBR 64-13, Feb, 1964, U.S. Dept. Com. Bur. Internat. Com, 1963 data as shown in Comercio Exterior, Banco Nacional de Comercio Exterior, S.A., May 1965, p. 395, and in Revista de Estadística, Dirección General de Estadística, Mexico, June 1965; 1964 and 1965 data as shown in Comercio Exterior op. cit., May 1966, p. 367.

The grouping together (item VI in table 31) of the net movement of certain types of revenue and expenditures with net errors and omissions, and the \$365 million increase in this item from 1964 to 1965 raise more questions than they answer. Thus, the information presented in table 28 is not as solid as might be hoped for but it is included in this report to illustrate that Mexico has balance-of-trade and balance-of-payment problems. A great deal of financial skill is required on the part of the United States to increase or even to maintain its export trade with Mexico.

# Index of Sources

(Arranged in alphabetical order of subject matter)

Balance of Payments: See Financial Statistics

## Braceros, Earnings

Banco Nacional de Comercio Exterior, S. A. Comercio Exterior. Mexico, May 1965, p. 395, and May 1966, p. 367.

California, State of, Department of Employment, Research and Statistics Section, as quoted in Final Report of the California Farm Labor Panel to Secretary of Labor W. Willard Wirtz, Dec. 1, 1965, Los Angeles, Calif.; published as Appendix I (Eye) in Year of Transition, Seasonal Farm Labor 1965--A Report From the Secretary of Labor, and also reproduced in the Congressional Record, House, Jan. 10, 1966, pp. 9-20.

## Braceros, Numbers and Employment

California Farm Labor Panel, op. cit. (See immediately preceding item.)

Farm Labor Developments, Review and Outlook. U.S. Dept. Labor, Bur. Employment Security, Mar. 1966.

McElroy, R. C., and Gavett, E. E. Termination of the Bracero Program. U.S. Dept. Agr., Agr. Econ. Rpt. 77, June 1965.

## Conversion Factors

Conversion Factors and Weights and Measures for Agricultural Commodities and Their Products. U.S. Dept. Agr. 1952, and revision, Statis. Bul. 362, 1965.

## Crop Production, Mexico

Banco Nacional de Comercio Exterior, S. A., Departamento de Estudios Economicos, Mexico, Fresh Cucumbers (translated title); Comercio Exterior, May 1966, p. 358. Data for additional years furnished by letter to the author.

Foreign Agricultural Service, U.S. Department of Agriculture. U.S. Agricultural Attache Reports. Unpublished.

\_\_\_\_\_. Foreign Agriculture Circular, Strawberries. FDAP 2-66, Apr. 1966.  
Economic Research Service, U.S. Department of Agriculture. Indices of Agricultural Production for the 20 Latin American Countries. . . Revised 1954 Through 1964, Preliminary 1965. ERS-Foreign 44, revised Jan. 1966.

## Crop Production, United States

Agricultural Statistics, 1965. U.S. Dept. Agr., 1965.

California Crop and Livestock Reporting Service. Asparagus for Processing, 1965 Season. (Mimeographed.)

Canners League of California. Special Asparagus Bulletin. San Francisco, annual issues.

Crop Reporting Board, Statistical Reporting Service, U.S. Department of Agriculture. Citrus Fruits. Oct. 1966.

\_\_\_\_\_. Crop Production, 1965 Annual Summary--Acreage, Yield, Production, by States. CR-PR 2-1(65), Dec. 1965.

\_\_\_\_\_. Crop Production. CrPr 2-2, June 10, 1966.

\_\_\_\_\_. Crop Production. CrPr 2-2, July 11, 1966.



- Crop Reporting Board, Statistical Reporting Service, U.S. Department of Agriculture. Vegetables--Fresh Market, Annual Summaries, VG 2-2, 1964 and 1965.
- \_\_\_\_\_. Vegetables--Fresh Market, Vg 2-1, Sept. 9, 1966.
- \_\_\_\_\_. Vegetables--Fresh Market, Vg 2-1, Oct. 7, 1966.
- \_\_\_\_\_. Vegetables--Processing, Annual Summaries, VG-3-2, 1964 and 1965.
- \_\_\_\_\_. Vegetables--Processing, Vg 3-1, Oct. 11, 1966.
- Federal Register, Vol. 29: p. 14620, Oct. 27, 1964, and p. 15801, Nov. 25, 1964, 7 C.F.R. 840,147 and 850,168-187. Vol. 30: p. 15403, Dec. 15, 1965, 7 C.F.R. 850,169.
- Garoian, Leon, and Halter, A.N. Termination of the Bracero Program: An Analysis of Economic Impact on Major Labor Intensive Horticultural Crops, California, 1965. Prepared for the National Commission on Food Marketing, Jan. 1966.
- Martin, William E. Alien Workers in United States Agriculture: Impacts on Production, Article 1163, Jour. Ser., Ariz. Agr. Expt. Sta. Published in 1966 Proceedings Issue of Jour. Farm Econ.
- Agricultural Stabilization and Conservation Service, U.S. Department of Agriculture. Sugar Reports, No. 160, Sept. 1965; No. 172, Sept. 1966.
- Duties: See Tariff Schedules
- Employment: See Braceros
- Exports: See Trade Statistics
- Financial Statistics
- Banco de Mexico, S. A. Departamento de Estudios Economicos. See Comercio Exterior and Overseas Business Reports (below, under this caption)
- Braceros, Mexico, and Foreign Trade. Farm Labor Developments, July 1966, pp. 19, 21. U.S. Dept. Labor, Bur. Employment Security.
- Comercio Exterior. Banco Nacional de Comercio Exterior, S. A., May 1965, p. 395, and May 1966, p. 367.
- Federal Reserve Bulletin. Mar. 1966, pp. 431-433, 438; Aug. 1966, p. 1257.
- House of Representatives, Committee on Appropriations. Hearings before a Subcommittee on Department of Agriculture Appropriations for 1967. Part 3, pp. 655, 680, Eighty-Ninth Cong. 2d. Sess. 1966.
- International Bank for Reconstruction and Development. Press Release No. 65/45, Sept. 17, 1965.
- Pizer, S., and Cutler, F., Foreign Investment, 1964-65, Survey of Current Business 45 (9): 27; Sept. 1965.
- \_\_\_\_\_. Revised Projections of Foreign Plant and Equipment Expenditures by Affiliates of U.S. Firms. Survey of Current Business 46 (3): 8; Mar. 1966.
- \_\_\_\_\_. Foreign Investments, 1965-66. Survey of Current Business 46 (9): 32; Sept. 1966.
- Overseas Business Reports. U.S. Dept. Com, Bur. Internat. Com. OBR 64-13, Feb. 1964.
- Revista de Estadística, Direccion General de Estadística, Mexico, June 1965.
- Spears, McGehee H. Trip Report, Apr. 13-30, 1966. U.S. Dept. Agr. Econ. Res. Serv., Foreign Develpt. and Trade Div. (Mimeographed.)
- Treasury Bulletin, Feb. 1964, p. 104; Feb. 1965, p. 104; Feb. 1966, pp. 107, 108; Mar. 1966, pp. 82, 83, 89-91, 102-106; May 1966, pp. 94-96, 109.
- Foreign Workers: See Braceros.
- Foreign Trade Statistics: See Trade Statistics.
- Imports: See Trade Statistics.
- Investments: See Financial Statistics.



Laws and Regulations, Pertaining to Braceros and Other Foreign Workers:

P.L. 82-78; 65 Stat. 119-121, July 12, 1951; 7 USCA 1461, et. seq.

P.L. 82-414, 66 Stat. 163, June 27, 1952; 8 USCA 1182 et. seq.

29 F.R. 19101-19102; 20 C.F.R. 610.10.

Tariff Schedules

U.S. Tariff Commission. Tariff Schedules of the United States Annotated (1965). TC Pub. 163.

Tourism: See Travel

Trade Statistics, Canada

Trade of Canada, Imports, 1965 and earlier. Dominion Bureau of Statistics. Jan.-June 1966 data obtained by letter from U.S. Assistant Agricultural Attache in Ottawa.

Trade Statistics, Mexico

Banco de Mexico, S. A. Informe Anual 1965. Mexico, D.F., 1966.

Banco Nacional de Comercio Exterior, S. A. Comercio Exterior de Mexico 1964. Mexico, D. F. 1966.

\_\_\_\_\_. Comercio Exterior. May 1966.

Trade Statistics, United States

Foreign Agricultural Service. U.S. Department of Agriculture. Foreign Agriculture Circular, FDAP 1-61, 1961, based on U.S. Bur. Census.

\_\_\_\_\_. Value of Fruit and Vegetable Imports from Mexico, 1956-1965.

Unpublished dittoed tabulation based upon U.S. Bur. Census data.

Economic Research Service, U.S. Department of Agriculture. Foreign Agricultural Trade of the United States, 1966 and earlier years for series based upon U.S. Bureau of the Census data.

\_\_\_\_\_. Op. cit. June 1966, May 1965, Feb.-Mar. 1964, for series based upon the Plant Quarantine Branch.

U.S. Bureau of the Census. Foreign Commerce and Navigation of the United States, 1946-1963. Washington, D.C., 1965.

\_\_\_\_\_. U.S. Imports, Tariff Schedules Annotated by Country, 1964 Annual. Washington, D.C., July 1965.

\_\_\_\_\_. U.S. Imports, TSUSA, Commodity by Country, Report FT 246, 1965 Annual. Washington, D.C., May 1966.

\_\_\_\_\_. United States Import Statistics, Reports FT 110 and FT 120 1956-1963 Annuals. Washington, D.C.

\_\_\_\_\_. U.S. Imports of Merchandise for Consumption, Report FT 125, Selected Monthly Issues, June 1964-June 1966. Washington, D.C.

\_\_\_\_\_. United States Export Statistics, Report FT 410, 1956-1965 Annuals and Selected Monthly Issues, June 1964-June 1966. Washington, D.C.

\_\_\_\_\_. United States Foreign Trade, Export Trade by Country. Summary Report FT 950-E, Selected Monthly Issues, Released 1964-66. Washington, D.C.

\_\_\_\_\_. United States Foreign Trade, Import Trade by Country. Summary Report FT 950-I, Selected Monthly Issues, Released 1964-66. Washington, D.C.

\_\_\_\_\_. Agriculture Specialist Reports. (Publicly available computer print-outs, containing monthly and cumulative monthly data on a fiscal year basis, on U.S. agricultural imports for consumption, TSUSA commodity by country of origin, and U.S. agricultural exports of domestic merchandise, Schedule B commodity by country of destination).

Travel

Miller, Etienne H. Foreign Travel Payments Hit New High in 1964, Survey of Current Business 45 (6): 25-28, June 1965.

\_\_\_\_\_. Travel Payments Continue to Rise in 1965, Survey of Current Business 46 (6): 15-17, June 1966.

## Appendix.--A Comparison of U.S. and Mexican Estimates on Travel Expenditures

According to the U.S. Department of Commerce, annual United States receipts from Mexican visitors to the United States ranged from \$232 million to \$265 million during 1963-65. Most of these receipts were border area receipts; only from \$65 million to \$85 million was received from Mexican visits beyond the border area.

According to the Bank of Mexico, Mexicans spent \$81 million to \$115 million on foreign tourism during 1963-65 (table 32). This estimate would be at least roughly in

TABLE 32.--A comparison of U.S. and Mexican estimates on travel expenditures, 1963, 1964, and 1965

Item	Mexican estimates	U.S. estimates
Mexican tourists' expenditures <sup>1</sup>	----- Million dollars -----	
1963:		
Border . . . . .	265	167
"Inside" . . . . .	81	65
Total . . . . .	346	232
1964:		
Border . . . . .	277	180
"Inside" . . . . .	97	70
Total . . . . .	374	250
1965:		
Border . . . . .	294	180
"Inside" . . . . .	115	85
Total . . . . .	409	265
U.S. tourists' expenditures in Mexico <sup>2</sup>		
1963:		
Border . . . . .	446	322
"Inside" . . . . .	211	126
Total . . . . .	657	448
1964:		
Border . . . . .	463	340
"Inside" . . . . .	241	140
Total . . . . .	704	480
1965:		
Border . . . . .	505	342
"Inside" . . . . .	278	160
Total . . . . .	783	502

<sup>1</sup> U.S. estimates pertain to Mexican travel in the United States only; Mexican estimates pertain to all Mexican travel abroad.

<sup>2</sup> Mexican estimates pertain to all foreign tourist expenditures in Mexico.

For sources see tables 26 and 31.

line with the U.S. estimate for receipts from Mexican visits beyond the border area, considering that there must have been some Mexican foreign travel in countries other than the United States.

However, aside from this one rough consistency, Mexican data on travel expenditures differ from equivalent U.S. data, just as Mexican data on braceros' "take-home" earnings (in the international monetary sense), the merchandise flow, and the trade balance between Mexico and the United States differ from equivalent U.S. data.

The Bank of Mexico reports from \$265 million in 1963 to \$294 million in 1965 for "border transactions" as a payments liability, that is, as Mexican expenditures at the U.S. border. These data compare with a range from \$167 million to \$180 million as reported by the United States.

According to the U.S. Department of Commerce, U.S. residents spent from \$448 million to \$502 million in Mexico each year from 1963 to 1965. Only from \$126 million to \$160 million of that total was spent on visits beyond the border area. The Bank of Mexico records annual payments credits for tourism ranging from \$211 million in 1963 to \$278 million in 1965--too little to be comparable with U.S. data on U.S. tourists' total or border area expenditures in Mexico, but much more than U.S. data on U.S. residents' expenditure in the interior of Mexico. The difference could be explained, at least partially, in terms of non-American foreign tourists' expenditures in Mexico.

In addition to these payment credits, the Bank of Mexico records credits for "border transactions" ranging from \$446 million in 1963 to \$505 million in 1965. Presumably, there is not much economic activity at the Mexican border with Guatemala and British Honduras, so the account must primarily refer to transactions at the U.S. border. The Bank of Mexico figures are far in excess of U.S. data on U.S. tourists' border area expenditures; U.S. figures range from \$322 million in 1963 to \$342 million in 1965.

Since U.S. currency circulates in the Mexican border areas as a secondary medium of exchange it may be surmised that Mexican estimates of border area receipts from tourism may be biased upward by the fact of such circulation and, further, by the velocity of such circulation.

UNITED STATES DEPARTMENT OF AGRICULTURE  
WASHINGTON, D.C. 20250

---

POSTAGE AND FEES PAID  
U.S. DEPARTMENT OF AGRICULTURE

OFFICIAL BUSINESS











